

**Wetland Delineation for the
LSI Property
in Gresham, Oregon**

(T1N, R3E, Sec 34C, Tax Lots 400, 500)
(T1N, R3E, Sec 34CD, Tax Lots 100, 200, 300, and 400)
(T1N, R3E, Sec 34D, Tax Lots 200, 300, 400, and 500)
(T1N, R3E, Sec 34AC, Tax Lots 1500 and 1600)
(T1N, R3E, Sec 34DC, Tax Lot 1300)

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I. INTRODUCTION

Pacific Habitat Services, Inc. (PHS) conducted a wetland delineation for a group of properties located at Twelvemile Corner in Gresham, Oregon, comprised of the following tax lots: T1N, R3E, Sec. 34C, Tax Lots 400, 500; T1N, R3E, Sec. 34CD, Tax Lots 100, 200, 300, and 400; T1N, R3E, Sec. 34D, Tax Lots 200, 300, 400, and 500; T1N, R3E, Sec. 34AC, Tax Lots 1500 and 1600; and T1N, R3E, Sec. 34DC, Tax Lot 1300.

This report summarizes the findings from PHS' delineation of wetlands and other water features within the study area. Figures, including a map locating wetlands within the study area, are located in Appendix A. Data sheets documenting on-site conditions are provided in Appendix B. Ground level photos of the site are located in Appendix C, and Appendix D includes historical aerial photos. Wetland delineation methods are described in Appendix E for the client.

II. RESULTS AND DISCUSSION

A. Landscape Setting and Land Use

The subject parcels cover approximately 221 acres within an area roughly bounded by NE 223rd Street and NE 242nd Drive (west and east, respectively) and by NE Glisan and NE Stark Streets (north and south, respectively) in Gresham, Oregon. The parcels are in west and east sections due to intervening tax lots that are either already developed for manufacturing uses (i.e. the ON Semiconductor chip manufacturing facility) or are simply unavailable for consideration.

Site topography varies from nearly flat to gently rolling over much of the southwestern and eastern portions of the site, since the site is located on an ancestral floodplain terrace of the Columbia River. However, the northwest portion of the site drops gradually, then relatively steeply off the edge of the terrace toward the northwest; slopes are especially steep within the forested area.

Current land use is primarily agricultural production, with nursery stock being the dominant product. The northwest portion of the site is partly forested, with a small network of incised stream channels draining this area. A large constructed pond is located west of the forested area. The pond appears to hold irrigation runoff and may also capture seasonal groundwater seepage; the LWI labels the pond as a stormwater detention facility. A regularly mowed fallow field is located west of the pond. Areas not used for nursery stock are typically maintained by mowing as well. A large building and several small barns are located south of the pond, and are only sporadically utilized at this time. A variety of businesses, a church, and residential housing surround the site.

B. Site Alterations

A review of historic aerial photographs from 1935 through the present show significant changes in agricultural and other land use practices over time. Aerials from 1955 and 1972 indicate agricultural activity only throughout the study area, with the large pond evident by 1972 and prior to construction of any large buildings. The pond was constructed for irrigation purposes, with a

pump located at its eastern end. The large building and associated outbuildings in the northwest part of the site was evident by 1989; most of the site was still in crop production. A 2001 aerial shows the site utilized primarily for nursery stock, which is still the dominant use.

Agricultural drainage ditches have been constructed and maintained over time on the upland terraces in order to convey seasonal stormwater accumulations as well as summer irrigation runoff across and ultimately off site. Some of the surface runoff from the southwestern portion of the site finds its way westward towards NE 223rd Street, which has been widened within the last 10 years. Several stormwater detention ponds have been constructed within the property near NE 223rd Street, with overflows conveyed to a roadside ditch and into the municipal stormwater system. These flows may ultimately join Fairview Creek to the north of NE Glisan Street.

PHS did not observe recent fill or removal activities, other than those associated with ongoing agricultural practices prevailing across the site.

C. Precipitation Data and Analysis

PHS initially conducted the wetland delineation and collected data in June, July, and September 2008, and again in January 2009. No precipitation fell on June 18, 2008, and rainfall in the two weeks prior totaled 0.23 inch. Precipitation for the month of June 2008, totaled 1.01 inches, which was 64% of normal. No precipitation fell on July 15, 2008, and just 0.28 inch fell in the previous two weeks. Precipitation in July 2008, totaled 0.29 inch, which was 40% of normal. No precipitation fell on September 9, 2008, or in the two weeks prior. Precipitation for the month of September totaled 0.48 inch, which was 29% of normal. Total rainfall for the 2007-2008 water year to date was 32.83 inches, which was 89% of normal (Oregon Weather Summary, June through September, 2008).

No precipitation fell on January 29, 2009, and just 0.14 inches fell in the two weeks prior. Precipitation for the month of January (through January 29) was 4.49 inches. Total rainfall for the 2008-2009 water year to date was 13.11 inches (National Weather Service, 2009).

The LSI site was revisited twice in April 2011 to assess whether any significant changes had occurred during the intervening years. No precipitation fell on April 13; however, 1.54 inches had fallen since April 1. The second visit on April 22 received 0.10 inch, with an additional 1.99 inches having fallen since the April 13 visit. Precipitation in April 2011 totaled 5.04 inches, which was 191% of normal. Total rainfall for the 2010-2011 water year to date is 39.33 inches, which was 132% of normal (National Weather Service, 2011).

Table 1 shows the average monthly rainfall in Portland for each month, as well as the range of values considered normal for this area (i.e. 70% chance that monthly total will fall within the 'normal' range of values) (NRCS WETS table for Portland WSFO, 2002).

Table 1. Average Monthly Rainfall (NRCS WETS Table)

Month	Average*	30% chance will have		Recorded rainfall (2008-9)**	Recorded rainfall (2010-11)***
		Less than	More than		
January	5.07	2.98	6.16	4.49 ('09)	4.73 ('11)
February	4.18	2.84	4.98	---	4.28 ('11)
March	3.71	2.85	4.31	---	6.43 ('11)
April	2.64	1.93	3.10	2.09 ('08)	5.04 ('11)
May	2.38	1.44	2.88	2.03 ('08)	--
June	1.59	0.94	1.93	1.01 ('08)	--
July	0.72	0.31	0.89	0.29 ('08)	--
August	0.93	0.33	1.13	1.24 ('08)	--
September	1.65	0.65	2.06	0.48 ('08)	--
October	2.88	1.57	3.52	1.77 ('08)	3.87 ('10)
November	5.61	3.72	6.73	4.15 ('08)	6.63 ('10)
December	5.71	3.89	6.82	2.70 ('08)	8.35 ('10)

*Average Monthly Rainfall (NRCS WETS Table) for Portland WSFO

**Recorded monthly rainfall (Oregon Weather Summary) for Portland (2008-early '09)

***Recorded monthly rainfall (Oregon Weather Summary) for Portland (2010-2011 water year to date)

Recorded precipitation for April, May, and June 2008 was below average, but considered to be within normal ranges for the area. Recorded precipitation for July was below average, and also considered to be below the normal range. Recorded precipitation for August was above average, and considered to be above the normal range. Recorded precipitation for September was below average, as well as outside the normal range. Recorded precipitation for January 2009 was below average, but considered to be within the normal range.

Recorded precipitation totals for March and April 2011 were well above average, and also well above the normal range, as earlier noted. Rainfall for January and February were within the normal range, while earlier in the water year values were within normal ranges for October and November 2010, but well above normal range in December 2010.

Rainfall fluctuations in the months preceding both the original delineation and the spring 2011 revisit are not expected to have significantly affected the wetland boundaries, as the required delineation methods aim to minimize discrepancies based on short term weather variations. These methods are described further in the following section.

D. Methods

PHS delineated the wetlands on the site based on indicators of wetland hydrology, hydric soils, and hydrophytic vegetation, in accordance with the Routine On-site Determination methodologies described in the *Corps of Engineers Wetland Delineation Manual, Wetlands Research Program Technical Report Y-87-1* ("The 1987 Manual"). The interim and final (Version 2.0) editions of the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region* have also been utilized in determining wetland indicators during both initial and recent site investigations.

The wetlands were typically either shallowly inundated or saturated within the upper 12 inches of the soil profile at the time of PHS's wetland delineation field work. However, in areas where primary indicators of hydrology were not present, secondary indicators of hydrology, including drainage patterns, were used in combination with hydrophytic vegetation and hydric soils, to determine the wetland/upland boundary.

Most of this site is currently used for growing nursery stock. Prior land uses include other forms of agriculture and much of the site has compacted soils from these activities. PHS was unable to dig some of the soil data pits to the required depth of 20 inches in several areas due to high rock content and compaction. These areas were determined to be upland or wetland based on plant cover, presence or absence of water, and topography.

The standard methodologies and field indicators used for determining the ordinary high water line (OHWL), such as vegetation changes, scour lines, debris lines, and water marks, were used to determine the jurisdictional limits of the streams and ditches within the site.

E. Description of all Wetlands and Other Non-Wetland Waters

Within the site boundaries, PHS identified eight wetlands, a forested stream/seep complex, and four ditches. Several stormwater detention areas and an irrigation pond were also identified in this study.

WETLANDS

Wetlands A to D

Wetlands A through D are all located within a narrow strip of land south of the ON semiconductor site. This area is roughly bounded by a gravel road along its north, west, and east sides, and by a compacted, leveled, and graveled surface used for the growth and storage of potted nursery plants along its south side. The narrow strip itself appears to have been subject to previous ground disturbance or fill activity, since the predominant substrate across this area is a silt/gravel mix that includes larger cobbles up to 6 inches or more in diameter. Vegetation is best developed in those areas where the fill is relatively rich in fines, and has been undisturbed for the longest period of time. Since each of these wetland units are subject to the same hydrologic inputs and share a similar substrate, they are treated collectively here.

Hydrology within Wetlands A to D appears to be driven by seasonal overland and groundwater flows augmented by the irrigation of nursery stock. The area to the south, and upslope, of the wetlands is utilized for rotating nursery stock in plastic pots, being readied for loading onto delivery trucks. Because the plants are in containers, they are irrigated during dry periods to maintain healthy plant stock. Excess irrigation runoff flows north, over and through the graveled storage area, and into the patch of periodically mowed vegetation where Wetlands A to D are located. Due to the geomorphic position of this area, water ponds in places for extended periods even in summer.

The 2008 fieldwork determined the presence of two smaller wetlands in this area; the western end at that time was subject to active agricultural disturbance and was to be revisited at a later time. On revisiting this area in April 2011, however, it was apparent that the site had been further modified, with fill shaped into a low berm in the northwest corner of the narrow strip of land. Vehicle movements in conjunction with recent mowing activities had also modified this undeveloped strip by creating fresh, relatively deep tire ruts in places. Much of this area was shallowly ponded, if not saturated to the surface, at least partly due to the recent heavy rains.

Wetland A is approximately 8,242 square feet (0.19 acre) in size and is the westernmost wetland unit within the narrow strip. Wetland B is approximately 9,063 square feet (0.21 acre) in size and is located immediately west of the small access road that connects the larger gravel road with the nursery storage area. Wetland C is approximately 34,574 square feet (0.80 acre) in size and is located immediately east of the small access road; it includes two upland islands. Wetland D is approximately 5,578 square feet (0.13 acre) in size and is the easternmost unit within the narrow strip of land, and the most elevated. The Cowardin classification for all four wetlands is palustrine, emergent, seasonally flooded (PEMC), and their HGM class is Slope.

Despite the high gravel and cobble content of the old fill materials in this area, soils within Wetlands A to D generally met the hydric soils definition with redox dark surface (F6) indicators in evidence. Unfortunately, PHS was generally unable to dig a soil pit in this area to the required 20-inch depth. Along with active indicators of hydrology (saturated soils and shallow inundation), algal mats and shallow drainage patterns were observed within these wetlands.

Since Wetlands A to D occupy the same landform and are subject to similar disturbance regimes and growing conditions, their vegetation cover is similar as well. The most depressional areas subject to shallow ponding support such hydrophytes as softstem bulrush (*Scirpus tabernaemontanii*, OBL) and cattail (*Typha latifolia*, OBL), while slightly more elevated areas are dominated by creeping bentgrass (*Agrostis stolonifera*, FAC) and by both tall and red fescues (*Festuca arundinacea*, *F. rubra*, both FAC). The adjacent uplands may still be mostly dominated by facultative species, but also include more upland species such as Queen Anne's lace (*Daucus carota*, UPL), spotted cat's ear (*Hypochaeris radicata*, FACU), sweet vernal grass (*Anthoxanthum odoratum*, FACU), North Africa grass (*Ventenata dubia*, UPL), and white and red clovers (*Trifolium repens*, *T. pratense*, FAC and FACU).

Wetland E

Wetland E is approximately 7,544 square feet (0.17 acre) and is located in the northwestern portion of the site. The Cowardin classification is palustrine, scrub-shrub to emergent, seasonally flooded (PSSC) and the HGM class is Slope. Vegetation within Wetland E consists of black cottonwood (*Populus trichocarpa*, FAC), red alder (*Alnus rubra*, FAC), Himalayan blackberry (*Rubus discolor*, FACU), creeping bentgrass, velvet grass (*Holcus lanatus*, FAC), and soft rush (*Juncus effusus*, FACW). The adjacent upland consists of black cottonwood, black locust (*Robinia pseudoacacia*, FACU), maple (*Acer* sp.), Himalayan blackberry, perennial ryegrass (*Lolium perenne*, FACU), bentgrass (*Agrostis* sp.), and rough bluegrass (*Poa trivialis*, FACW). The grassy portions of Wetland E are regularly mowed. Much of the woody cover upslope of the wetland appears to be comprised of trees planted in rows, possibly as part of an old nursery planting.

Hydrology within Wetland E is driven by upslope groundwater seepage and stormwater sheetflow during the wet season. Surface soil cracks and drainage patterns were observed during the initial field visits; a revisit in April 2011 confirmed the area with minor modifications, as vegetation was more readily assessed prior to mowing, and direct indicators of hydrology were evident. Soils within Wetland E met the hydric soils definition with redox dark surface (F6) indicators.

Wetland E narrows downslope into a swale that flows westward toward NE 223rd before effectively widening and disappearing near the edge of the fill mound to the north, and prior to reaching the west fenceline. Hydric soils were not in evidence at the west end of this swale.

Wetland F

Wetland F is approximately 3,836 square feet (0.09 acre), and is located in the northwestern portion of the site. The Cowardin classification is PEMC and the HGM class is Slope. Vegetation within Wetland F consists of velvetgrass, bird's foot trefoil (*Lotus corniculatus*, FAC), and meadow foxtail (*Alopecurus pratensis*, FACW); the latter species was evident in the 2011 revisit, but may not have been identifiable during the 2008 visits due to mowing. The adjacent upland area consists predominantly of perennial ryegrass.

Hydrology within Wetland F appears to be from groundwater seeps located in the upper (southern) portions of the wetland. Drainage patterns were evident, and surface saturation within the wetland was observed during the June 2008 site visit, as well as during the April 2011 revisit to the site. Surface overflows from this wetland continue downslope into the large manmade pond (Wetland G). Soils within Wetland F met the hydric soils definition with redox dark surface (F6) indicators.

During the April 2011 visit, a small excavated depression was located upslope of Wetland F within a stand of European white birch (*Betula nigra*) and Himalayan blackberry. The depression measured less than 10 feet wide across its bottom, which was ponding water up to 20 inches deep and supported a dense growth of water starwort (*Callitriche* sp.). Groundwater was seeping into the pit from upslope at a steady flow rate; this seepage appeared to be re-emerging further downslope within Wetland F, indicating that there may be a restrictive soil layer influencing the downslope groundwater movement in this area. The original purpose for excavating this depression is unknown at this time.

Wetland G/ Pond

This large manmade pond includes a vegetated wetland fringe; this feature is described further under Other Waters, since it is primarily unvegetated, yet is mostly less than 6.6 feet in depth.

Wetland H

Wetland H is approximately 17,309 square feet (0.40 acre), and is located in the northwestern portion of the site. The Cowardin classification is PEMC and the HGM class is Slope. Vegetation within the wetland consists of velvetgrass and other mowed turf grasses that PHS was unable to identify during the original site visits. A revisit in April 2011 confirmed that much of this area is

also dominated by meadow foxtail (*Alopecurus pratensis*, FACW). The adjacent upland area consisted primarily of bentgrass. Although the dominant vegetation within both the wetland and the upland is FAC, subdominant vegetation within the wetland is also FAC, while subdominant vegetation within the adjacent upland is FACU.

Hydrology within Wetland H appears to be driven by seasonal storm-and groundwater inputs that may shallowly inundate much of the site during prolonged rainy periods. Upslope groundwater seepage from the large pond to the south may also contribute to prolonged soil saturation, as the site extends north from near the base of the impoundment. Drainage patterns were observed within the wetland. Soils within Wetland H met the hydric soils definition with redox dark surface (F6) indicators. Wetland H does not extend offsite.

OTHER WATERS

Wetland G/ Pond

A large manmade pond approximately 64,293 square feet (1.48 acres) is located in the northwestern portion of the site. The Cowardin classification is palustrine, unconsolidated bottom, permanently flooded, excavated (PUBHx), and the HGM class is Depressional. The pond was excavated sometime between 1955 and 1972. Vegetation in the wetland fringe adjacent to the pond consists primarily of reed canarygrass (*Phalaris arundinacea*, FACW).

The pond appears to be fed by both groundwater seepage and surface water inputs. A pump located at the eastern end of the pond may be utilized as necessary to pump water for irrigation of nursery stock within the site. Soils along the edge of the pond met the hydric soils definition with redox dark surface (F6) indicators in evidence.

Stream Complex

A system of mostly perennial natural streams is located east of the pond within a closed canopy forest. The total area of this complex is 10,189 square feet (0.23 acre). The Cowardin classification is riverine, upper perennial, streambed, cobble/gravel (R3SB3) and the HGM class is Riverine. Vegetation within the stream complex and below the OHWL consists of red alder, Oregon ash (*Fraxinus latifolia*, FACW), Himalayan blackberry, trailing blackberry (*Rubus ursinus*, FACU), and common horsetail (*Equisetum arvense*, FAC).

The adjacent riparian area includes big leaf maple (*Acer macrophyllum*, FACU), cherry (*Prunus* sp.), Himalayan blackberry, trailing blackberry, and fringecup (*Tellima grandiflora*, UPL).

The streams were generally flowing during PHS' site visits, although during the September 9, 2008, site visit the easternmost stream was not flowing. Water within the stream appears to come from several hillside seeps or springs. The headwaters of the streams that flow north begin where vegetation changes from upland to hydrophytic species, and a bed and bank becomes apparent.

The streams range from 5 to 15 feet wide, and are not incised. The substrate is predominantly composed of gravel and cobble, with some fines present as well. The easternmost stream flows north off site, as do the two streams that flow west. The most westerly stream flows north, and likely enters a culvert and continues north under NE Glisan street; however, PHS was unable to locate the culvert.

An excavated diversion channel is present at the southwest end of the complex. Diverted water enters a culvert, and appears to discharge to the pond. PHS was able to hear the irrigation pump located in the pond echoing through the culvert.

Ditch 1

Ditch 1 is located in the east-central portion of the site, and when included with the excavated depression it feeds into, is approximately 26,290 square feet (0.60 acre) in size. Ditch 1 has been excavated from upland to convey irrigation and stormwater runoff to the depression area located at the north end of the ditch (data point 1). The Cowardin classification for the ditch and depression is PEMC, but an HGM class was not assigned to these manmade features. Vegetation within the ditch is absent; however, vegetation within the depression area at the north end of the ditch consisted of common yarrow, white clover, wild carrot, spotted cat's ear, and unidentifiable mowed grasses.

No hydrologic indicators were observed in either the ditch or the depression at the time of survey. Soils, to a depth of 16 inches, did not meet hydric soil criteria. Ditch 1 continues offsite via a grated culvert located at its north end. The culvert extends to the north beneath NE Glisan Street.

Ditch 1 was excavated in upland, is less than 10 feet wide, and does not contain food or game fish. Wetland vegetation and hydric soils are also absent. As such, Ditch 1 does not meet wetland or other waters criteria.

Ditch 2

Ditch 2 is approximately 4,545 square feet (0.10 acre) and is located in the southwestern portion of the site, west of Wetland A. The Cowardin class is PEMC; an HGM class was not assigned since the ditch is manmade. Ditch 2 has been excavated from upland to convey irrigation and stormwater runoff to another ditch that feeds to a stormwater detention area, located in the western portion of the site. A data point was not taken within the ditch because the ditch had clearly defined bed and banks.

Vegetation within Ditch 2 consists of cattail and soft stem bulrush. Surface saturation was observed on the June 25, 2008, site visit. The ditch boundary was determined by the presence of soil saturation, observation of drainage patterns, and the transition from obligate wetland species to facultative and drier grasses.

A culvert beneath a dirt access road is located at the north end of the ditch. The culvert feeds to Ditch 3 (described below).

Ditch 2 was excavated from upland soil, is less than 10 feet wide, and does not contain food or game fish. Therefore the ditch does not meet other waters criteria. However, wetland vegetation and hydric soils are present. The ditch appears to have been excavated to direct stormwater and irrigation runoff west, to the stormwater detention facilities.

Ditch 3

Ditch 3 is approximately 9,387 square feet (0.22 acre) in area, and is also located in the southwestern portion of the site. The Cowardin class is PEMC; an HGM class was not assigned since the ditch is manmade. Ditch 3 has been excavated from upland to convey irrigation and stormwater runoff to a stormwater detention area, located in the western portion of the site. Vegetation within Ditch 3 consists of creeping bentgrass and soft stem bulrush. No adjacent upland data point was documented because the ditch is well defined and the adjacent ground is highly disturbed and compacted by ongoing agricultural activities.

Soils within the upper six inches of the soil profile did not meet hydric soil criteria; however, four inches of inundation was observed. A culvert conveying water from Ditch 2 is located at the eastern end of this ditch, which conveys flows westward into a stormwater detention area.

Ditch 3 was excavated from upland soils, is less than 10 feet wide, and does not contain food or game fish. Therefore the ditch does not meet other waters criteria. Wetland vegetation and hydrology are present, although hydric soils are absent within the upper 6 inches of the soil profile. The ditch has been excavated to direct surface runoff westward to the stormwater detention facilities.

Ditch 4

Ditch 4 is approximately 1,609 square feet (0.04 acre) in area, and is located along the western property boundary adjacent to NE 223rd Street. The Cowardin class is PEMC; an HGM class was not assigned since the ditch is manmade. Vegetation within the ditch consists of mowed grasses that were unidentifiable at the time of fieldwork. Ditch 4 appears to have been excavated from upland to convey stormwater and irrigation runoff into a catch basin located at the southern end of the ditch, which presumably connects to the City of Gresham's stormwater system associated with NE 223rd improvements. These flows may be routed westward beneath NE 223rd into a tributary of Fairview Creek. Ditch 4 does not connect to any of the stormwater detention areas.

Ditch 4 was excavated from upland soil, is less than 10 feet wide, and does not contain food or game fish. Therefore the ditch does not meet other waters criteria. Vegetation consisted of mowed, unidentifiable grasses that are likely facultative or drier; the soils within the ditch were not examined. Ditch 4 appears to have been excavated from upland to convey stormwater and irrigation runoff into a catch basin, which is presumed to connect to the city's stormwater treatment system.

Stormwater detention areas

Four stormwater detention areas are located in the southwestern portion of the site, just east of 223rd Street. These areas were excavated from upland soils to hold stormwater and irrigation runoff. PHS did not observe water within the detention areas during any of the 2008 site visits. The detention areas are lined with rip rap, therefore PHS was unable to dig soil pits to determine if hydric soils are present. Vegetation within the detention areas consists primarily of weedy, mostly upland species, including orchard grass (*Dactylis glomerata*, FACU), sweet vernal grass, spotted cat's ear, creeping bentgrass, and bluegrass (*Poa* sp.).

No inlets or outfalls were observed within the detention areas. Ditch 3 conveys runoff into the easternmost detention pond. Water then appears to percolate into the ground. PHS did not observe drainage patterns or any other indications that water overflows from the detention areas.

Irrigation pond

A smaller irrigation pond (of approximately 5,313 square feet, or 0.12 acre in size) is located in the south-central portion of the site near the main entry road. The Cowardin class is palustrine, open water, permanently flooded, excavated (POWHx). As the pond was artificially created, an HGM class has not been assigned.

Vegetation is not present in the pond; soils were not examined due to the depth of water (depth unknown). The pond had water during all of PHS' site visits. The pond appears to be used to store water for irrigation of the adjacent nursery stock. The pond does not continue off site.

F. Deviation from LWI or NWI

The Local Wetland Inventory (LWI) for the City of Gresham shows a stormwater detention facility in the northwestern portion of the site; this is consistent with PHS' findings. The LWI also maps a stream, using data from Metro, in the southwestern portion of the site. PHS did not observe a stream in this area. PHS documented 8 wetlands, 4 ditches, a stream complex, and several stormwater detention areas. LWI maps are generated through aerial photo interpretation and visual confirmation during site assessments. A lack of landowner permission to assess the site during the LWI, may be the reason for the discrepancy between the LWI and PHS' findings.

The US Fish and Wildlife Service's National Wetlands Inventory (NWI) maps a palustrine, unconsolidated bottom, permanently flooded, excavated wetland in the northwestern portion of the site. This is consistent with PHS's delineation of the pond. NWI maps are generated primarily through the interpretation of color infrared aerial photographs (scale of 1:58,000), with limited "ground truthing" to confirm the interpretations. The small size of the on-site wetland and ditches, and the scale of the aerial photographs used to prepare the NWI is the likely reason for the discrepancy between the wetlands mapping and the existing on-site conditions.

G. Mapping Method

PHS originally flagged the limits of the wetlands and ditches within the site in 2008. Compass Engineering performed a professional land survey of the delineated boundaries. The accuracy of the original survey was sub-centimeter, while the data points were added to the wetland delineation figure based on field notes, with an estimated accuracy of +/- 3 feet.

Subsequently, the site was revisited in April 2011 to determine whether significant changes had occurred to wetland boundaries. PHS noted that changes had occurred in the vicinity of original wetlands A and B. This area was redelineated into four separate wetland units (Wetlands A to D) and the revised boundaries were surveyed using a resource-grade GPS. Post-processing of the shapefile provided sub-meter accuracy for both the flagged line and data points. Minor revisions were also made to wetlands E and F, with similar accuracy standards.

H. Additional Information

POTENTIAL JURISDICTION

Ditch 1

Ditch 1 appears to be used to convey irrigation runoff from the nursery stock to a depressional area at the ditch's north end. No hydrologic indicators were observed within the ditch or within the depressional area at the ditch's north end. Soils, to a depth of 16 inches, did not meet hydric soil criteria. Ditch 1 appears to have been excavated wholly from upland soils, and does not meet wetland criteria; therefore, Ditch 1 should not be considered jurisdictional.

Ditches 2 and 3

Ditches 2 and 3 appear to be used to convey irrigation runoff from the nursery stock to the stormwater detention area located at the western end of the site. Although the ditches meet wetland criteria, they appear to have been excavated wholly from upland soils; Ditches 2 and 3 should not be considered jurisdictional.

Ditch 4

Ditch 4 appears to have been excavated from upland to convey irrigation runoff into a catch basin located at the southern end of the ditch, and is presumed to connect to the City of Gresham's stormwater system. Ditch 4 appears to have been excavated wholly from upland soils, therefore, Ditch 4 should not be considered jurisdictional.

Stormwater detention areas

Four stormwater detention areas are located along the southwestern property boundary. Although soils were not examined due to a riprap apron, vegetation consists of predominantly upland species. These detention areas appear to have been excavated wholly from upland soils, and therefore should not be considered jurisdictional.

I. Results and Conclusions

Within the study area, PHS delineated eight wetlands, four ditches, a stream system, and an excavated pond. The total acreage of wetland and other waters, as well as the ditches and detention and irrigation ponds within the study area boundary are summarized in Table 2 below.

Table 2. Total wetland and other waters acreage within the LSI property in Gresham, Oregon

Feature	Area (square feet)	Cowardin Class	HGM Class	Jurisdictional (Yes/No)	
				DSL	COE
Wetland A	8,242	PEMC	Slope	Yes	No (isolated)
Wetland B	9,063	PEMC	Slope	Yes	No (isolated)
Wetland C	34,574	PSSC	Slope	Yes	No (isolated)
Wetland D	5,578	PEMC	Slope	Yes	No (isolated)
Wetland E	7,544	PEMC	Slope	Yes	Yes
Wetland F	3,836	PEMC	Slope	Yes	Yes
Wetland G [Pond]	64,293	PUBHx	Depressional/ Slope	Yes	Yes
Wetland H	17,309	PEMC	Slope	Yes	Yes
Wetlands (with WL G/pond)	150,438 sf				
Stream Complex	10,189	R3SB3	Riverine	Yes	Yes
Other Waters	10,189				
Ditch 1 (with excavated depression)	26,290	PEMC	N/A	No	No
Ditch 2	4,545	PEMC	N/A	No	No
Ditch 3	9,387	PEMC	N/A	No	No
Ditch 4	1,609	PEMC	N/A	No	No
Stormwater detention areas	5,901	PEMCx	N/A	No	No
Irrigation pond	5,313	PEMCx	N/A	No	No
Other features	53,045 sf				
Total	213,672 sf (4.90 ac)				

J. Required Disclaimer

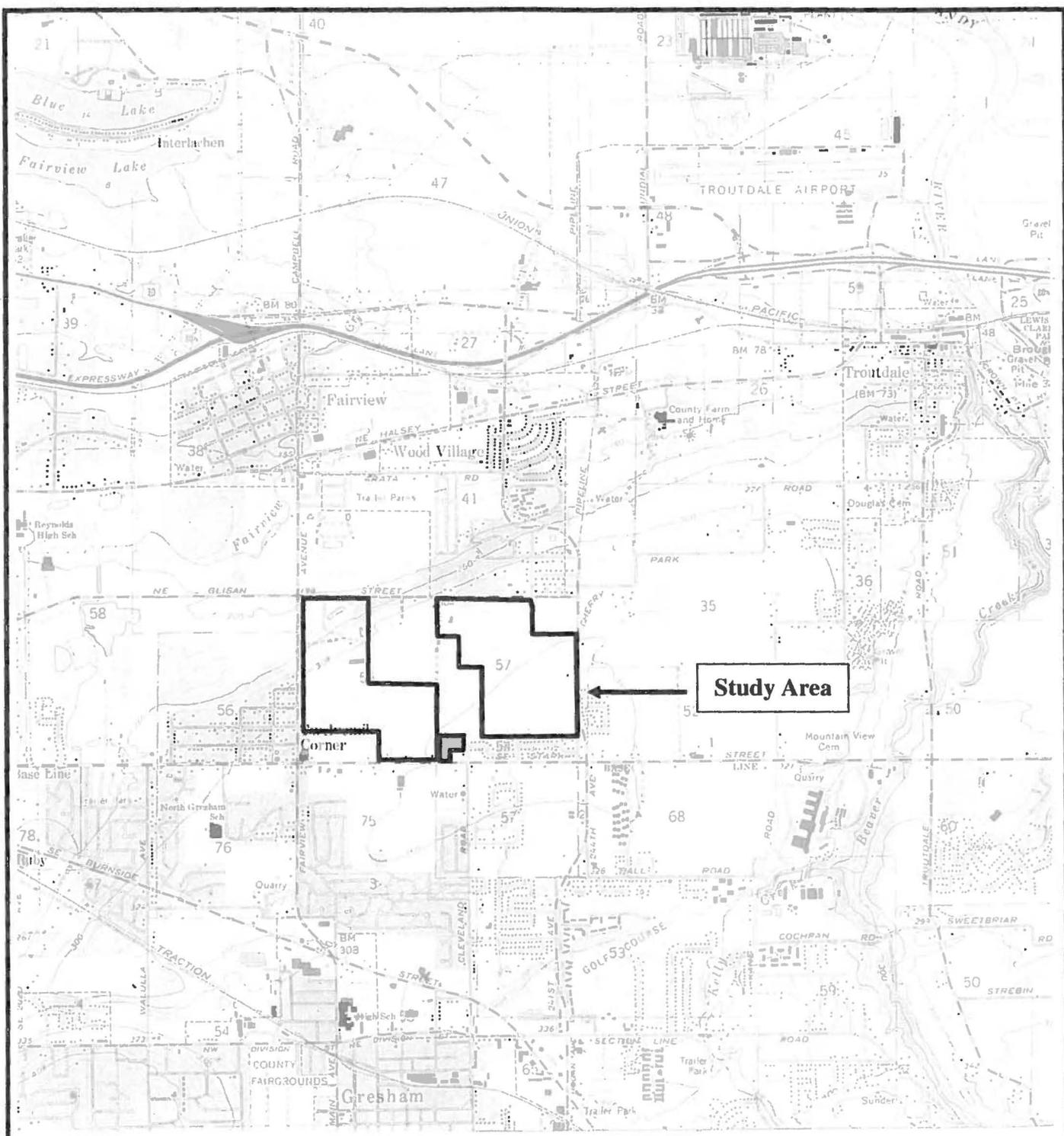
This report documents the investigation, best professional judgment and conclusions of the investigators. It is correct and complete to the best of our knowledge. It should be considered a Preliminary Jurisdictional Determination of wetlands and other waters and used at your own risk unless it has been reviewed and approved in writing by the Oregon Department of State Lands in accordance with OAR 141-090-0005 through 141-090-0055.

III. REFERENCES

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Appendix A

Figures



5/13/11

4796

Location and general topography for the LSI Property in Gresham, OR (USGS Camas OR-WA quadrangle, 1961, photo revised 1975).

FIGURE
1



THIS MAP WAS PREPARED FOR
ASSESSMENT PURPOSE ONLY

SE 1/4 SW 1/4 SEC. 34 T. 1N. R. 3E. W. 1/4
MULTNOMAH COUNTY
175 1907

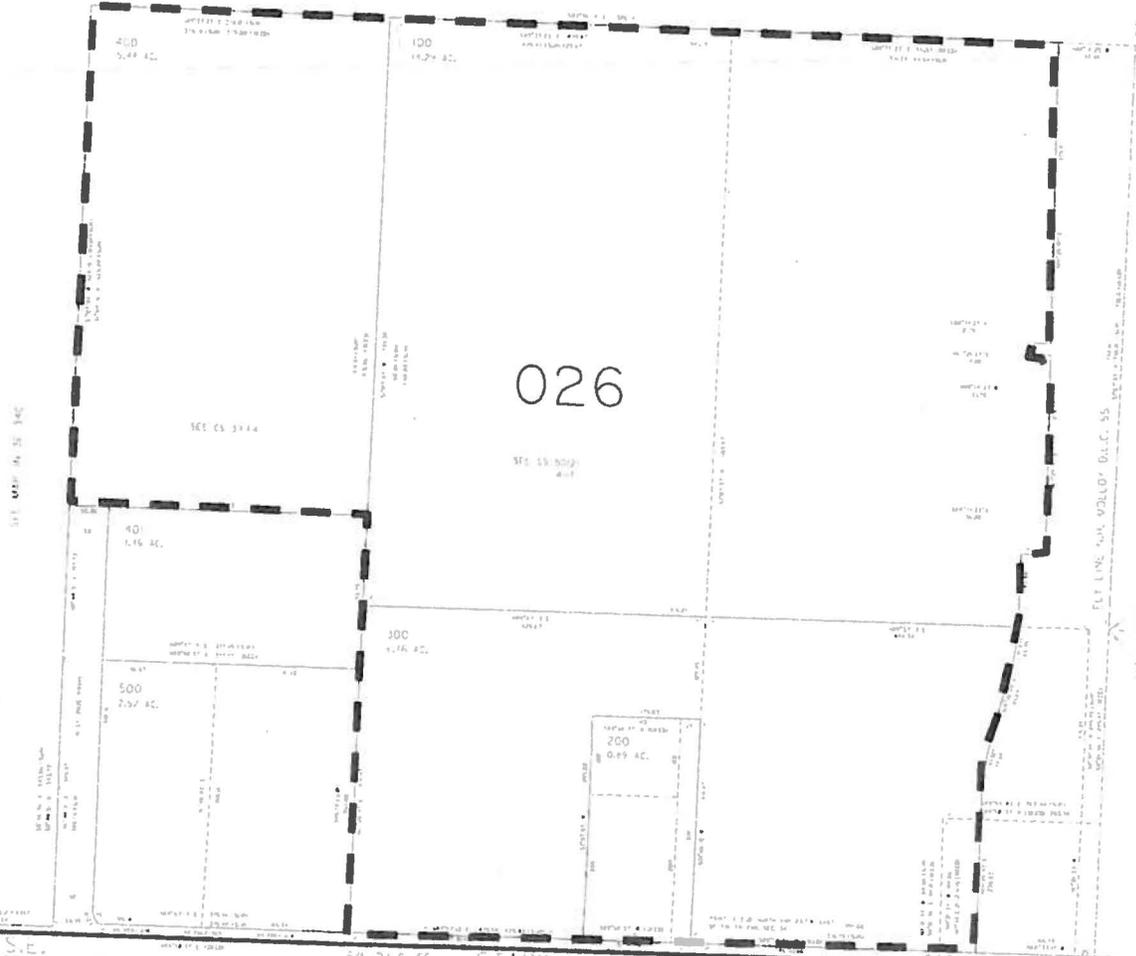
1N 3E 34CD
GRESHAM

SHRIMP
J. H. 1995

SHRIMP
J. H. 1995

CANCELLED NO.
W20

SEE MAP IN 3E 34C



026

SEE MAP IN 3E 34D

S.W. COR.
ALANSON TAX LOT
D.L.C. 57
N.W. COR.
JOHN ROLLER
D.L.C. 56

SEE MAP IN 3E 34C

STARK RD. 924' (BASE LINE RD.)

SEE MAP IN 3E 34A

1N 3E 34CD
GRESHAM

Study Area

7/24/08

4322

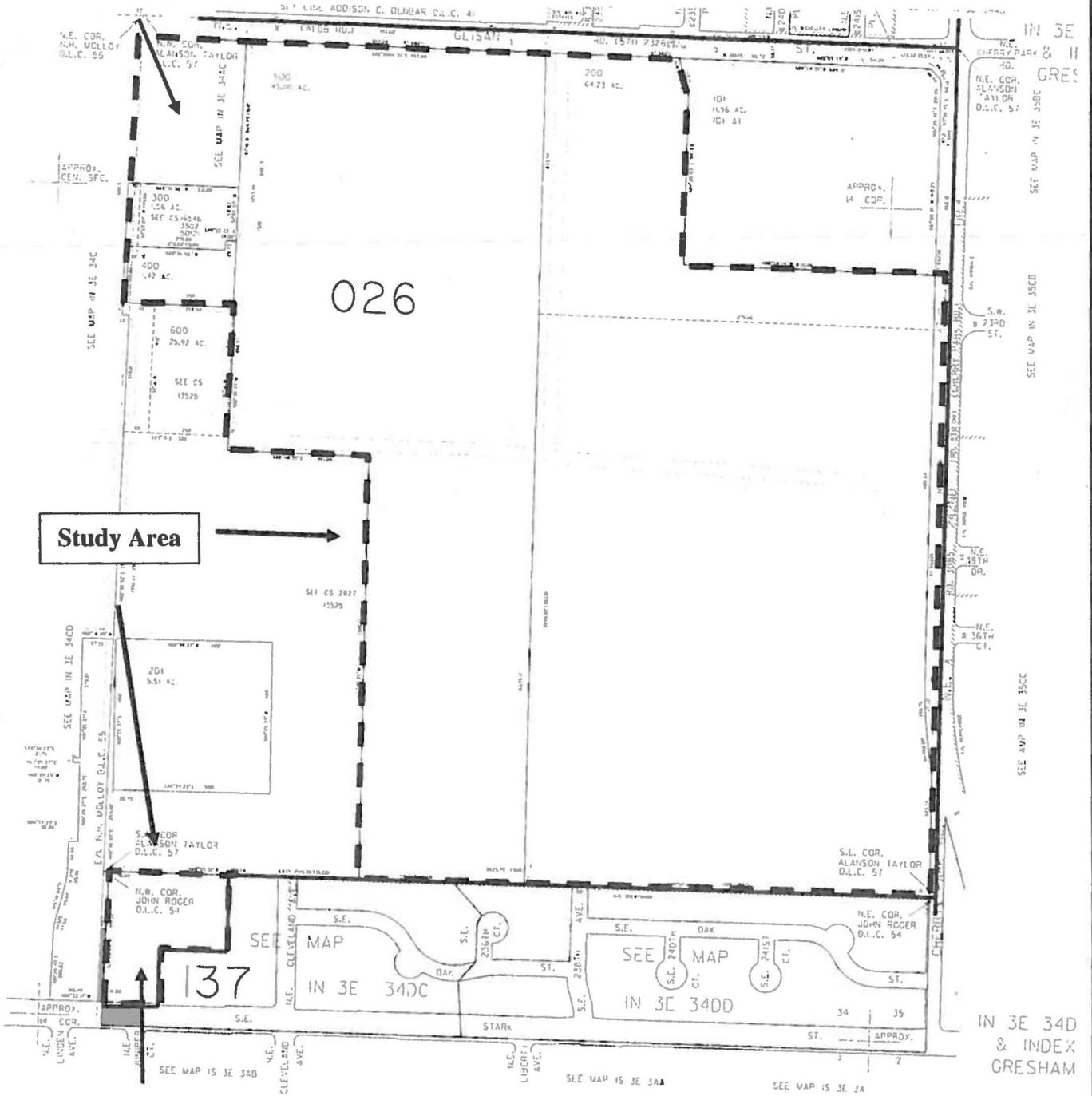
Tax Lot Map for the LSI Property in Gresham, OR (Tax Map 1N 3E 34CD Tax Lots 100, 200, 300, 400).

FIGURE
2B



Pacific Habitat Services, Inc.

See Figure 2D



Study Area

See Figure 2E

7/24/08

4233

Tax Lot Map for the LSI Property in Gresham, OR (Tax Map 1N 3E 34D tax Lots 200,300, 400, and 500, Tax Map 1N 3E 34AC tax Lots 1500 and 1600 (Figure 2D) and Tax Map 1N 3E 34DC tax Lot 1300 (Figure 2E)).

FIGURE
2C



— Pacific Habitat Services, Inc. —

THIS MAP WAS PREPARED FOR ASSESSMENT PURPOSE ONLY

SW 1/4 SE 1/4 SEC. 34 T.1N. R.3E. W.M.
MULTNOMAH COUNTY
1" = 100'

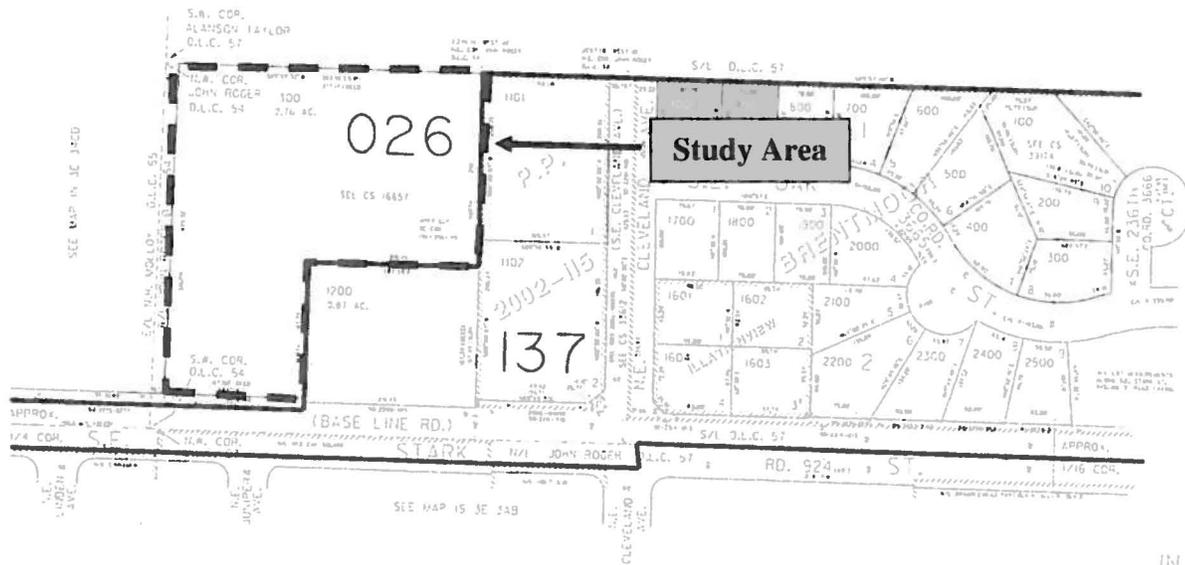
IN 3F 34DC
GRESHAM

APPROX.
1716 COR.

APPROX.
1716 COR.

CANCELLED NO.
100
400
500
600

SEE MAP IN 3E 34D



SEE MAP IN 3E 34D

SEE MAP IN 3E 34D

IN 3E 34DC
GRESHAM

7/24/08

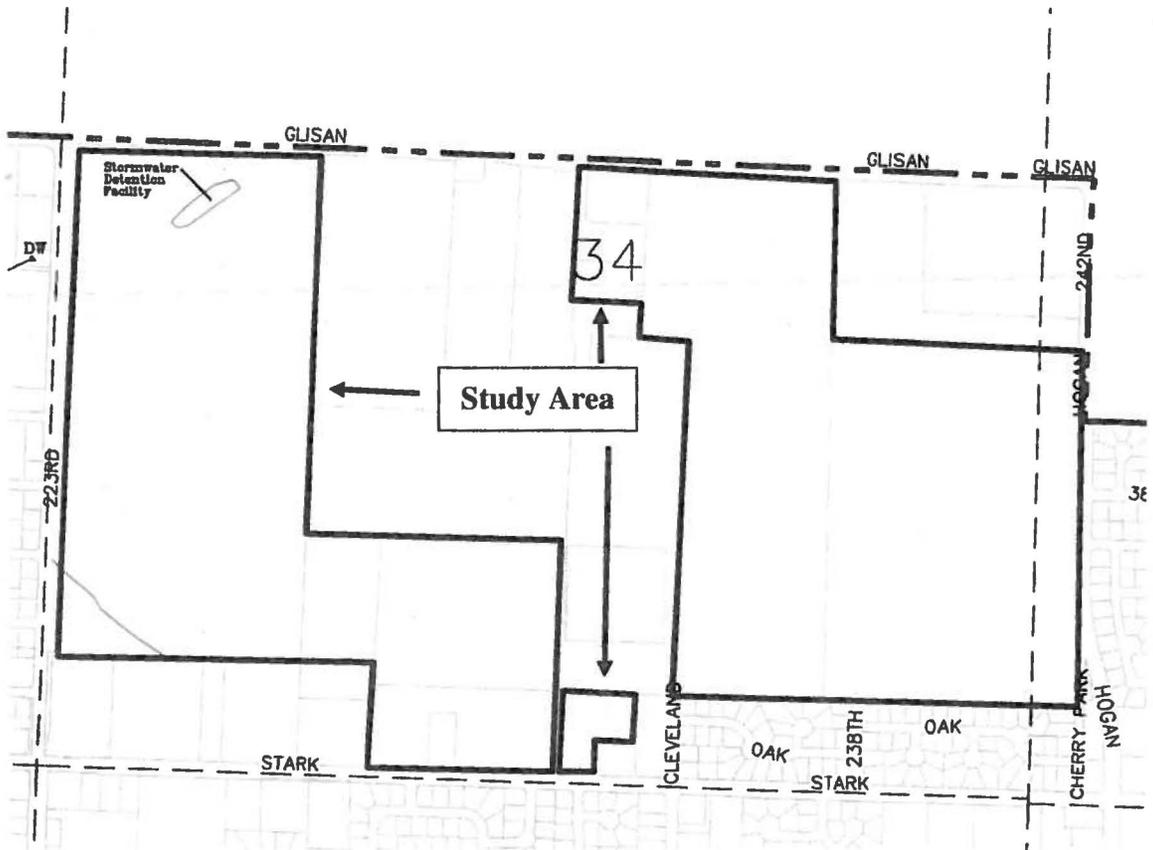
4233

Tax Lot Map for the LSI Property in Gresham, OR (Tax Map 1N 3E 34DC tax Lot 1300).

FIGURE
2E



Pacific Habitat Services, Inc.



T 1N R 3E Section 34
 CITY OF GRESHAM
 LOCAL WETLAND INVENTORY
 June 2004

LEGEND

- Wetland
- Possible wetland
- Delineated wetland
- Delineated wetland (less than 0.5 ac)
- Delineated wetland
- DSL reference number
- Wetland mosaic
- Wetland/stream designator
- Locally significant wetland
- Field verified
- Mitigation site
- Sample point
- Stream - data from METRO
- Site access granted
- Urban Growth Boundary
- Section line

5/13/11

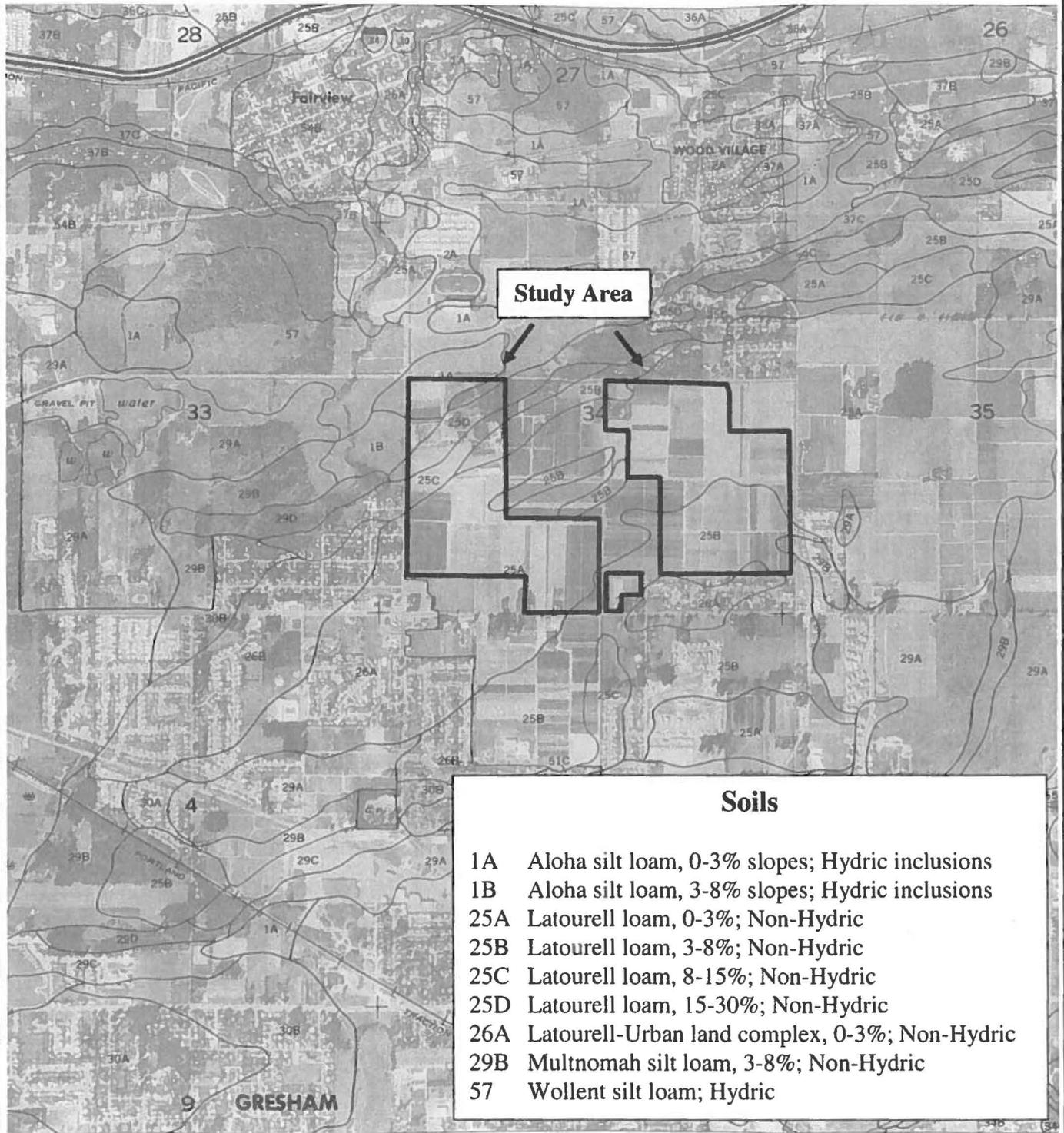
4796

Local Wetlands Inventory Map for the LSI Property in Gresham, OR (Shapiro and Associates, 2004).

FIGURE
3



Pacific Habitat Services, Inc.



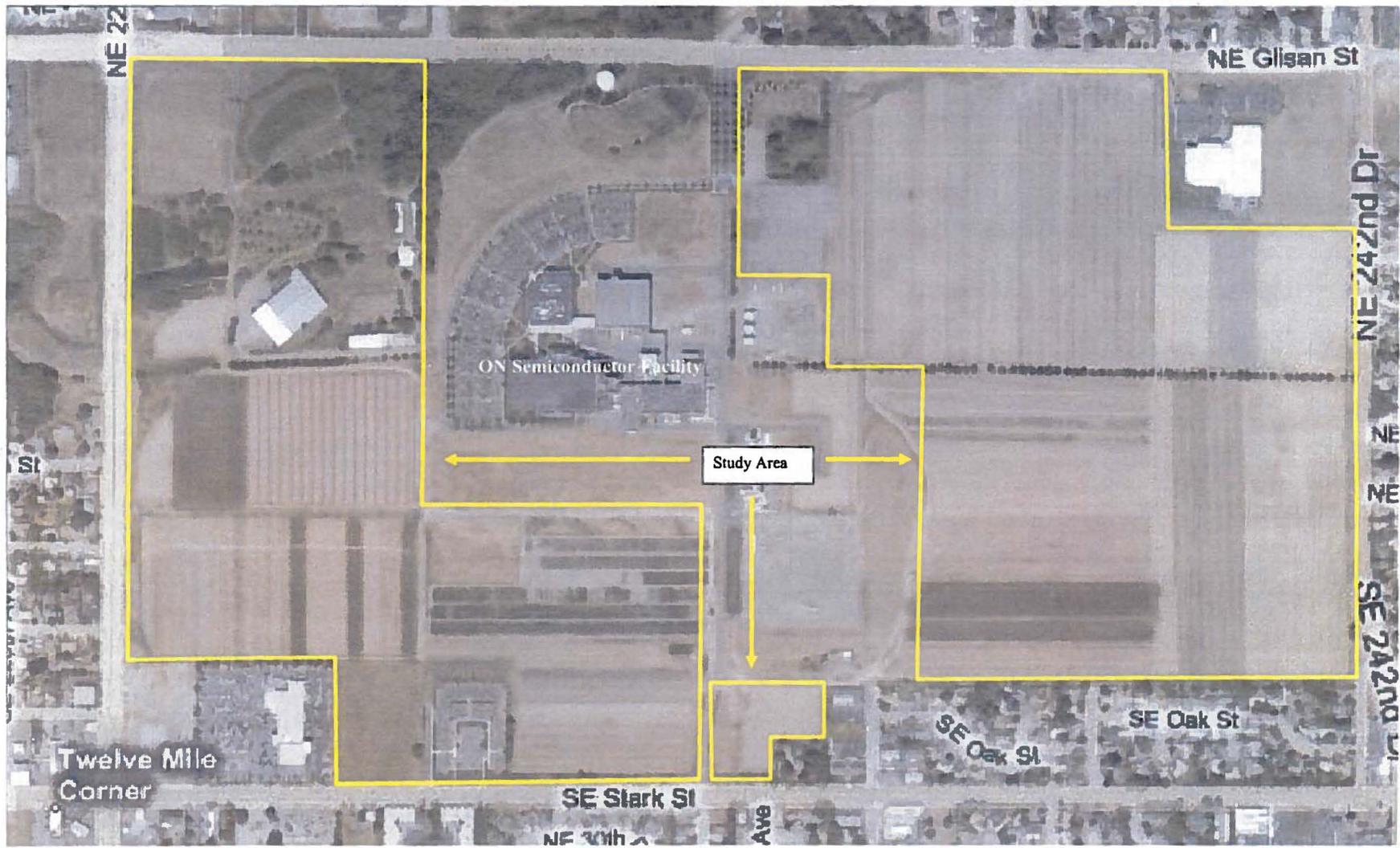
5/13/11

4796

Soil Series Map of the LSI Property in Gresham, OR (NRCS Soil Survey Multnomah County, OR sheet 21).

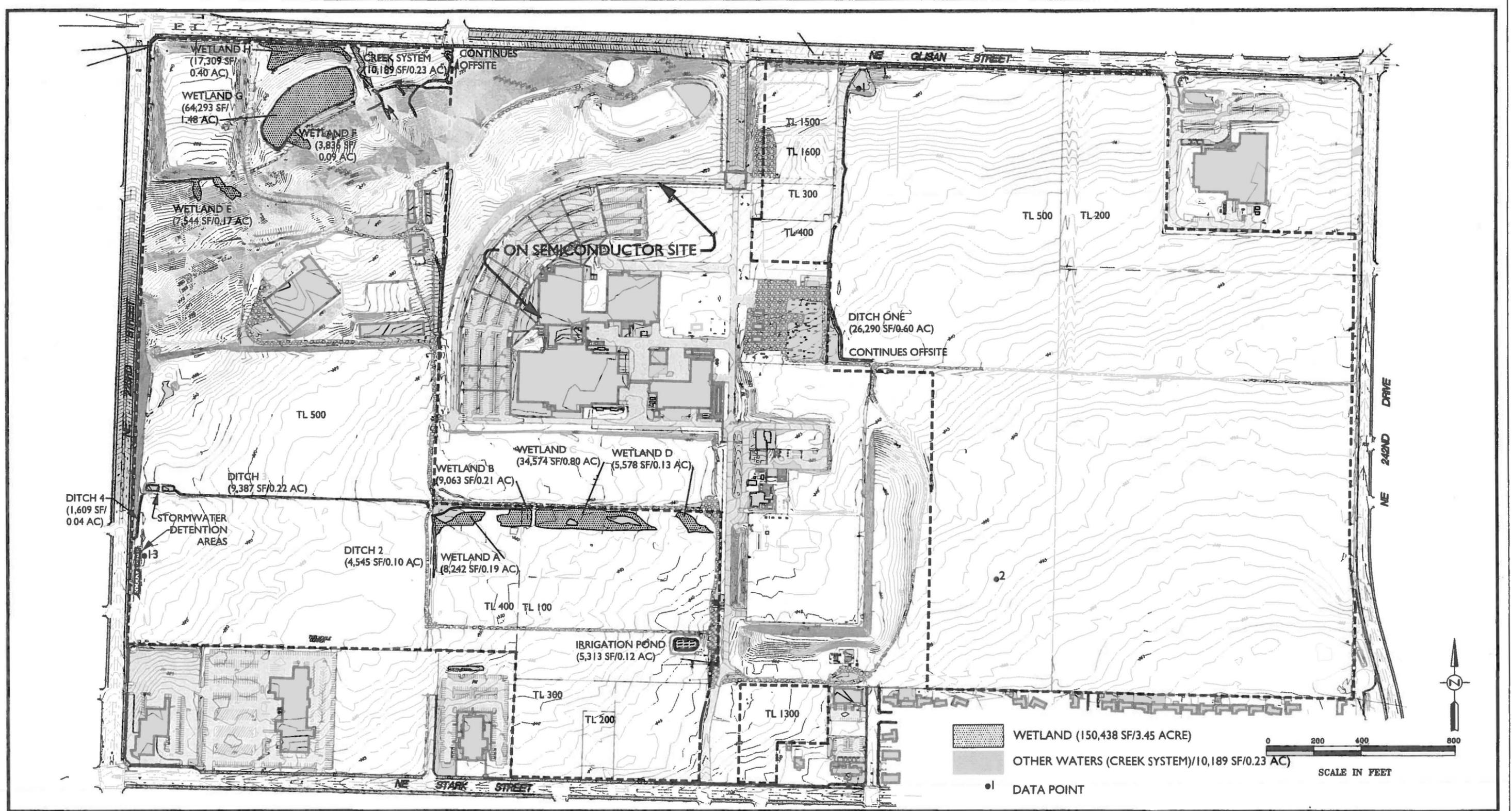
FIGURE
4





2007 aerial photo of the LSI Property in Gresham, OR (photo courtesy of LiveSearch website).

FIGURE
5



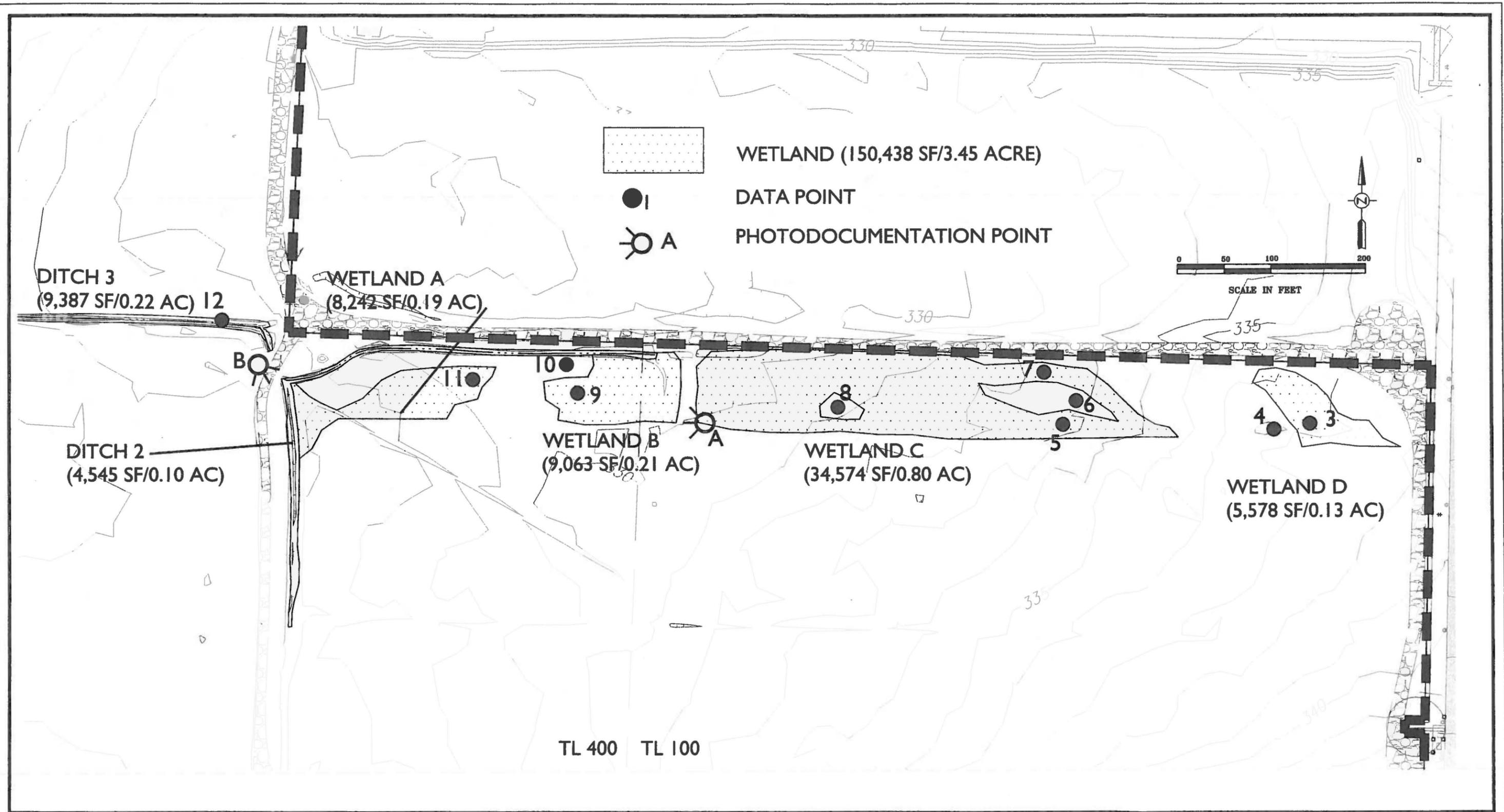
4796
5/10/11



Pacific Habitat Services, Inc.

Existing conditions, data points #1, #2, and #13, for the LSI property in Gresham, Oregon. Survey provided by Compass Engineering. Survey accuracy is sub-centimeter in original delineation; wetland boundaries for Wetlands A–D, and E were updated in 2011 using a resource grade GPS unit for sub-meter accuracy. Data point accuracy is +/- 1 meter. See Figure 6A and 6B for details of Wetlands A through H, location of photodocumentation points, and the creek system.

FIGURE
6



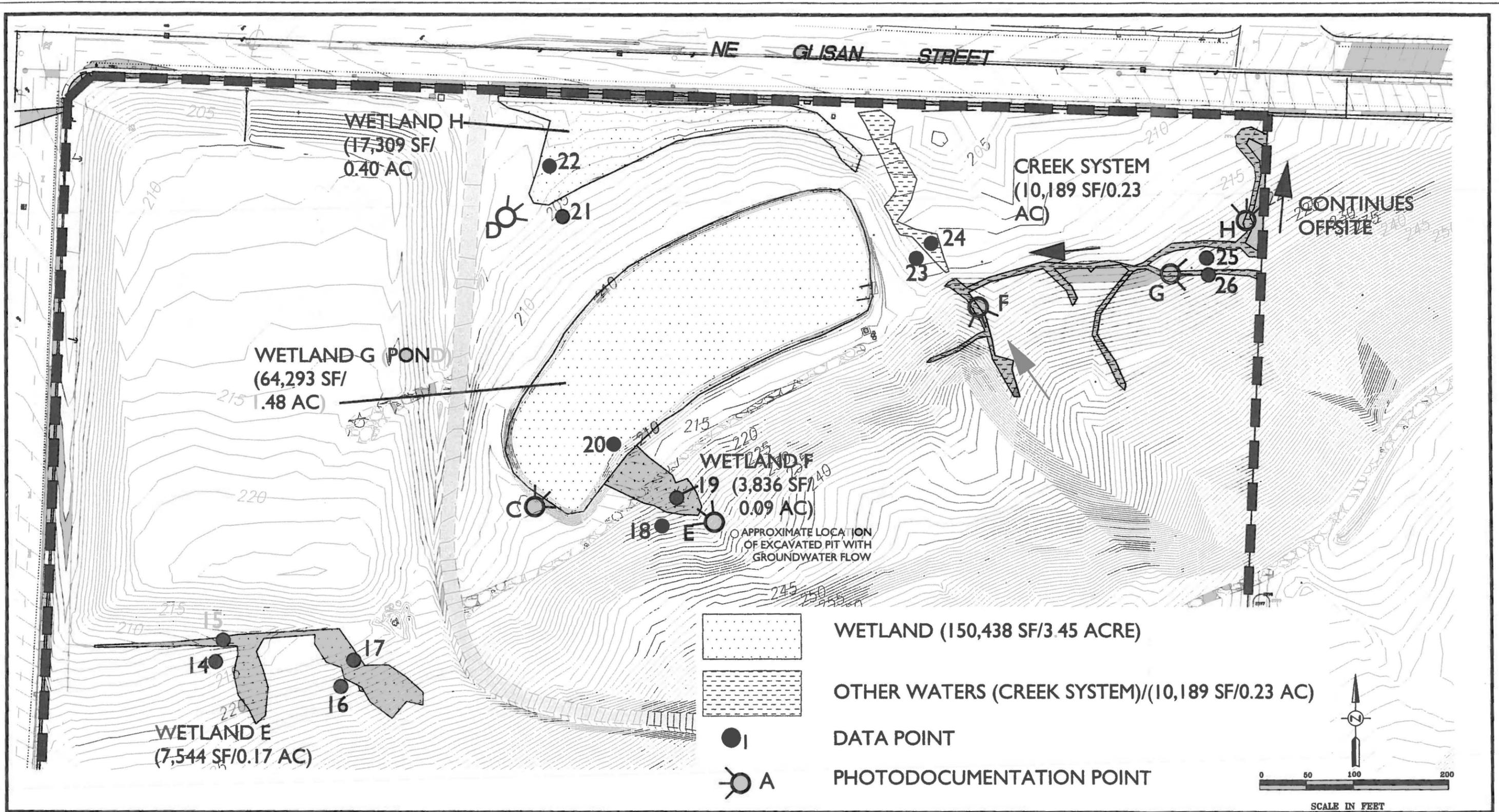
4796
5/10/11

Detail of existing conditions at Wetlands A through D, and associated photodocumentation points and data points for the LSI property in Gresham, Oregon. Survey provided by Compass Engineering. Original survey accuracy is sub-centimeter. Areas revisited in 2011 (Wetlands A-D) have sub-meter accuracy. Data point accuracy is +/- 1 meter.

FIGURE
6A



Pacific Habitat Services, Inc.



4796
5/10/11

Detail of existing conditions at Wetlands E through H, and associated photodocumentation points and data points for the LSI property in Gresham, Oregon. Survey provided by Compass Engineering. Original survey accuracy is sub-centimeter. Area redelineated in 2011 (SE corner of Wetland E) has sub-meter accuracy. Data point accuracy is +/- 1 meter.

FIGURE
6B



Pacific Habitat Services, Inc.

Appendix B

Wetland Determination Data Sheets

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Proptry City/County: Gresham/Multnomah Sampling Date: 7/15/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 1
 Investigator(s): DG Section, Township, Range: Township 1N/Range 3 East/Section 34D/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks:
This area is located in a depression at the end of a ditch that conveys stormwater. No wetland indicators were observed.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)	
1	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)	
2	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>40%</u> (A/B)	
3	_____	_____	_____		
4	_____	_____	_____		
	<u>0</u>	= Total Cover			
Sapling/Shrub Stratum (plot size: _____)				Prevalence Index Worksheet:	
1	_____	_____	_____	Total % Cover of _____	Multiply by: _____
2	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>	
3	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
4	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
5	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
	<u>0</u>	= Total Cover		UPL Species _____ x 5 = <u>0</u>	
Herb Stratum (plot size: <u>5'</u>)				Column Totals <u>0</u> (A)	<u>0</u> (B)
1	<u>Achillea millefolium</u>	<u>5</u>	<u>X</u>	Prevalence Index = B/A = <u>#DIV/0!</u>	
2	<u>Trifolium repens</u>	<u>5</u>	<u>X</u>		
3	<u>Daucus carota</u>	<u>2</u>	<u>X</u>		
4	<u>Hypochaeris radicata</u>	<u>3</u>	<u>X</u>		
5	<u>Mowed grass</u>	<u>10</u>	<u>X</u>		
6	_____	_____	_____		
7	_____	_____	_____		
8	_____	_____	_____		
	<u>25</u>	= Total Cover			
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Indicators:	
1	_____	_____	_____	_____ Dominance Test is >50%	
2	_____	_____	_____	_____ Prevalence Index is ≤ 3.0 ¹	
	<u>0</u>	= Total Cover		_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
% Bare Ground in Herb Stratum <u>75</u>				_____ Wetland Non-Vascular Plants ¹	
				_____ Problematic Hydrophytic Vegetation ¹ (Explain)	

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Remarks:

Hydrophytic Vegetation Present? Yes _____ No X

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/3	100					Silt Loam	
5-16	10YR 3/4	100					Sandy Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 9/9/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 2
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34D/TL 500
 Landform (hill/slope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: <u>Typical condition for eastern parcels; within nursery operation.</u>	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: <u>30</u>)				Number of Dominant Species	
1 <u>Picea sp. (nursery stock)</u>	<u>80</u>	<u>X</u>	<u>NOL</u>	That are OBL, FACW, or FAC: <u>0</u> (A)	
2 _____				Total Number of Dominant Species Across All Strata <u>1</u> (B)	
3 _____				Percent of Dominant Species That are OBL, FACW, or FAC: <u>0%</u> (A/B)	
4 _____				Prevalence Index Worksheet:	
5 _____	<u>80</u>	= Total Cover		Total % Cover of _____ Multiply by _____	
Sapling/Shrub Stratum (plot size: _____)				OBL Species _____ x 1 = <u>0</u>	
1 _____				FACW species _____ x 2 = <u>0</u>	
2 _____				FAC Species _____ x 3 = <u>0</u>	
3 _____				FACU Species _____ x 4 = <u>0</u>	
4 _____				UPL Species _____ x 5 = <u>0</u>	
5 _____	<u>0</u>	= Total Cover		Column Totals <u>0</u> (A) <u>0</u> (B)	
Herb Stratum (plot size: _____)				Prevalence Index = B/A = <u>#DIV/0!</u>	
1 _____				Hydrophytic Vegetation Indicators:	
2 _____				_____ Dominance Test is >50%	
3 _____				_____ Prevalence Index is ≤ 3.0 ¹	
4 _____				_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
5 _____				_____ Wetland Non-Vascular Plants ¹	
6 _____				_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7 _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8 _____	<u>0</u>	= Total Cover		Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
Woody Vine Stratum (plot size: _____)					
1 _____					
2 _____					
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>10</u>					

Remarks:
Vegetation in this area consists of ornamental Picea sp. nursery stock.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10YR 4/4	100					Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:		Secondary Indicators (2 or more required)
Primary Indicators (minimum of one required; check all that apply)		
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available
None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 3
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 100
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: In wetland D.					

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>3</u> (A)	
1	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
2	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
3	_____	_____	_____	Prevalence Index Worksheet:	
4	_____	_____	_____	Total % Cover of _____ Multiply by:	
5	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>	
	<u>0</u>	= Total Cover		FACW species _____ x 2 = <u>0</u>	
Sapling/Shrub Stratum (plot size: _____)				FAC Species _____ x 3 = <u>0</u>	
1	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
2	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
3	_____	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)	
4	_____	_____	_____	Prevalence Index =B/A = <u>#DIV/0!</u>	
5	_____	_____	_____	Hydrophytic Vegetation Indicators:	
6	_____	_____	_____	_____ 1- Rapid Test for Hydrophytic Vegetation	
7	_____	_____	_____	<u>X</u> 2- Dominance Test is >50%	
8	_____	_____	_____	_____ 3-Prevalence Index is ≤ 3.0 ¹	
	<u>0</u>	= Total Cover		_____ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
Herb Stratum (plot size: <u>5</u>)				_____ 5- Wetland Non-Vascular Plants ¹	
1	<u>20</u>	<u>X</u>	<u>OBL</u>	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
2	<u>2</u>	_____	<u>OBL</u>	_____	
3	<u>10</u>	<u>X</u>	<u>FAC</u>	_____	
4	<u>30</u>	<u>X</u>	<u>FAC</u>	_____	
5	<u>3</u>	_____	<u>FACW</u>	_____	
6	<u>8</u>	_____	<u>FAC</u>	_____	
7	<u>2</u>	_____	<u>FACW</u>	_____	
8	_____	_____	_____	_____	
	<u>75</u>	= Total Cover		_____	
Woody Vine Stratum (plot size: _____)				_____	
1	_____	_____	_____	_____	
2	_____	_____	_____	_____	
	<u>0</u>	= Total Cover		_____	
% Bare Ground in Herb Stratum <u>25</u>				_____	

Remarks:
More depressional areas partly unvegetated (deeper ponding)- some are tied to vehicle tire tracks. Whole area has been underlain by gravels/cobbles- soil only a few inches thick over cobble in some areas.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	N 2.5/	50					Sandy Loam	
0-6		50						gravel
6-8	N.2.5	40	10YR 3/3	20	C	M	Sandy Loam	c motts
6-8		40						gravel/cobble
8+								refusal due to larger cobbles (>6"D)

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydic Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydic Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input checked="" type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes X No _____ Depth (inches): 7
 Saturation Present? Yes X No _____ Depth (inches): 0
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

None

Remarks:

Perched system likely due to compacted gravel in substrate- some water seeping into hole from surface to 3" below.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 4
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 100
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			
Remarks:					

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1				That are OBL, FACW, or FAC:	<u>1</u> (A)
2				Total Number of Dominant	
3				Species Across All Strata:	<u>1</u> (B)
4				Percent of Dominant Species	
	<u>0</u>	= Total Cover		That are OBL, FACW, or FAC:	<u>100%</u> (A/B)
Sapling/Shrub Stratum (plot size: _____)				Prevalence Index Worksheet:	
1				Total % Cover of	Multiply by:
2				OBL Species	x 1 = <u>0</u>
3				FACW species	x 2 = <u>0</u>
4				FAC Species	x 3 = <u>0</u>
5				FACU Species	x 4 = <u>0</u>
	<u>0</u>	= Total Cover		UPL Species	x 5 = <u>0</u>
Herb Stratum (plot size: <u>5</u>)				Column Totals	<u>0</u> (A) <u>0</u> (B)
1	<u>5</u>		<u>UPL</u>	Prevalence Index = B/A = <u>#DIV/0!</u>	
2	<u>4</u>		<u>FAC</u>		
3	<u>2</u>		<u>FACU</u>		
4	<u>70</u>	<u>X</u>	<u>FAC</u>		
5	<u>2</u>		<u>UPL</u>		
6	<u>1</u>		<u>UPL</u>		
7	<u>2</u>		<u>NI</u>		
8	<u>4</u>		<u>FAC</u>		
	<u>90</u>	= Total Cover			
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Indicators:	
1				1- Rapid Test for Hydrophytic Vegetation	
2				<u>X</u> 2- Dominance Test is >50%	
	<u>0</u>	= Total Cover		3-Prevalence Index is ≤ 3.0 ¹	
				4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
				5- Wetland Non-Vascular Plants ¹	
				Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
% Bare Ground in Herb Stratum <u>5</u>					

Remarks: Moss 5%. May be other fine grasses mixed in with Agrostis.

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/3	80					Sandy Loam,	
0-4		20						gravel
4-10	10YR 3/3	40					Sandy Loam	
4-10		40						gravel
4-10		10						cobble
4-10		10						rock

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Refusal on large rock. It appeared clear that rock/gravel continues below excavated depth.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

None

Remarks

Moist at surface only.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 5
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 100
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
SE portion of Wetland C

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1	_____	_____	_____	That are OBL, FACW, or FAC: <u>1</u> (A)	
2	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>1</u> (B)	
3	_____	_____	_____	Percent of Dominant Species	
4	_____	_____	_____	That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
5	_____	_____	_____	Prevalence Index Worksheet:	
<u>0</u> = Total Cover				Total % Cover of _____ Multiply by: _____	
Sapling/Shrub Stratum (plot size: _____)				OBL Species _____ x 1 = <u>0</u>	
1	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
2	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
3	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
4	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
5	_____	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)	
<u>0</u> = Total Cover				Prevalence Index = B/A = <u>#DIV/0!</u>	
Herb Stratum (plot size: <u>5</u>)				Hydrophytic Vegetation Indicators:	
1	<u>85</u>	<u>X</u>	<u>FAC</u>	_____ 1- Rapid Test for Hydrophytic Vegetation	
2	<u>5</u>	_____	<u>FACW</u>	<u>X</u> 2- Dominance Test is >50%	
3	<u>5</u>	_____	<u>UPL</u>	_____ 3-Prevalence Index is ≤ 3.0 ¹	
4	<u>3</u>	_____	<u>FACW</u>	_____ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
5	<u>2</u>	_____	<u>FAC</u>	_____ 5- Wetland Non-Vascular Plants ¹	
6	<u>tr</u>	_____	<u>FAC</u>	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7	_____	_____	_____	_____	
8	_____	_____	_____	_____	
<u>100</u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
1	_____	_____	_____		
2	_____	_____	_____		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	90	10YR 3/4	C	M		Sandy Loam	medium to coarse, 10% gravel
6-9	10YR 3/2	10					Sandy Loam	
6-9	10YR 3/3	40					Sandy Loam	
6-9	10YR 3/4	40					Sandy Loam	10% gravel
9-12	10YR 4/4	95					Sandy Loam	
9-1	2.5Y 4/2	5						color on ped faces

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 6
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 100
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Small upland 'island' in Wetland C	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>3</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>67%</u> (A/B)
1				
2				
3				
4				
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: _____)				
1				
2				
3				
4				
5				
	<u>0</u>	= Total Cover		
Herb Stratum (plot size: <u>5</u>)				Prevalence Index Worksheet: Total % Cover of _____ Multiply by: OBL Species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC Species _____ x 3 = <u>0</u> FACU Species _____ x 4 = <u>0</u> UPL Species _____ x 5 = <u>0</u> Column Totals <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>#DIV/0!</u>
1	<u>Agrostis stolonifera</u>	<u>20</u>	<u>X</u> <u>FAC</u>	
2	<u>Plantago lanceolata</u>	<u>10</u>	<u>FAC</u>	
3	<u>Taraxacum officinale</u>	<u>5</u>	<u>FACU</u>	
4	<u>Trifolium repens</u>	<u>5</u>	<u>FAC</u>	
5	<u>Trifolium pratense</u>	<u>7</u>	<u>FACU</u>	
6	<u>Hypochaeris radicata</u>	<u>20</u>	<u>X</u> <u>FACU</u>	
7	<u>Daucus carota</u>	<u>3</u>	<u>UPL</u>	
8	<u>Festuca rubra</u>	<u>30</u>	<u>X</u> <u>FAC</u>	
		<u>100</u>	= Total Cover	
Woody Vine Stratum (plot size: _____)				
1				
2				
		<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum _____				Hydrophytic Vegetation Indicators: 1- Rapid Test for Hydrophytic Vegetation <u>X</u> 2- Dominance Test is >50% 3-Prevalence Index is ≤ 3.0 ¹ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet) 5- Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
Hydrophytic Vegetation Present? Yes <u>X</u> No _____				
Remarks:				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/3	100					Sandy Loam	with >30% gravel
10-14	10YR 2/2	99	5YR 3/3	<1	C	M	Sandy Loam	with >30% gravel
14+								refusal

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :	
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)	
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)	
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)	
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)		
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)		
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)		
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
Refusal at 14"- compacted gravel/cobble mix with >60% rock. Mixed in materials, not native.

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	
<input type="checkbox"/> Salt Crust (B11)	
<input type="checkbox"/> Aquatic Invertebrates (B13)	
<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	
<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	
<input type="checkbox"/> Presence of Reduced Iron (C4)	
<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C8)	
<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	
<input type="checkbox"/> Other (Explain in Remarks)	

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
Assumed to lack wetland.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 7
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 100
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope Slope (%) <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	Is Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Remarks:
Swale in NE end of Wetland C

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1				That are OBL, FACW, or FAC: <u>2</u> (A)	
2				Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3				Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
4				Prevalence Index Worksheet:	
_____ = Total Cover				Total % Cover of _____ Multiply by:	
Sapling/Shrub Stratum (plot size: _____)				OBL Species _____ x 1 = <u>0</u>	
1				FACW species _____ x 2 = <u>0</u>	
2				FAC Species _____ x 3 = <u>0</u>	
3				FACU Species _____ x 4 = <u>0</u>	
4				UPL Species _____ x 5 = <u>0</u>	
5				Column Totals <u>0</u> (A) <u>0</u> (B)	
_____ = Total Cover				Prevalence Index = B/A = <u>#DIV/0!</u>	
Herb Stratum (plot size: <u>5</u>)				Hydrophytic Vegetation Indicators:	
1	<u>50</u>	<u>X</u>	<u>FAC</u>	1- Rapid Test for Hydrophytic Vegetation	
2	<u>20</u>	<u>X</u>	<u>FAC</u>	<u>X</u> 2- Dominance Test is >50%	
3	<u>10</u>		<u>FACW</u>	3-Prevalence Index is ≤ 3.0 ¹	
4	<u>5</u>		<u>UPL</u>	4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
5	<u>2</u>		<u>UPL</u>	5- Wetland Non-Vascular Plants ¹	
6	<u>10</u>		<u>FAC</u>	Problematic Hydrophytic Vegetation ¹ (Explain)	
7	<u>3</u>		<u>FAC</u>		
8					
_____ = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Present?	
1				Yes <u>X</u>	No _____
2					
_____ = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-12	10YR 3/2	90	7.5YR 3/4	10			Silt Loam	>40% gravel component, motts are m-f
12+								refusal

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	⁴ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: None

Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:
Refusal at 12" due to compacted gravels/cobbles (up to 7" diameter).

HYDROLOGY

Wetland Hydrology Indicators:	
Primary Indicators (minimum of one required; check all that apply)	Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> Saturation (A3)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Aquatic Invertebrates (B13)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Presence of Reduced Iron (C4)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)	<input type="checkbox"/> Other (Explain in Remarks)
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<input type="checkbox"/> Geomorphic Position (D2)
	<input type="checkbox"/> Shallow Aquitard (D3)
	<input type="checkbox"/> Fac-Neutral Test (D5)
	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
	<input type="checkbox"/> Frost-Heave Hummocks (D7)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes X No _____ Depth (inches) 0

(includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:
Unknown if water table is present- soils poorly drained due to compacted gravels, stay saturated in upper part.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 8
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 100
 Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks
Small upland island in Wetland C

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1	_____	_____	_____	That are OBL, FACW, or FAC: <u>2</u> (A)	
2	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3	_____	_____	_____	Percent of Dominant Species	
4	_____	_____	_____	That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
5	_____	_____	_____	Prevalence Index Worksheet:	
<u>0</u> = Total Cover				Total % Cover of _____ Multiply by: _____	
Sapling/Shrub Stratum (plot size: _____)				OBL Species _____ x 1 = <u>0</u>	
1	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
2	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
3	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
4	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
5	_____	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)	
<u>0</u> = Total Cover				Prevalence Index = B/A = <u>#DIV/0!</u>	
Herb Stratum (plot size: <u>5</u>)				Hydrophytic Vegetation Indicators:	
1	<u>20</u>	<u>X</u>	<u>FAC</u>	_____ 1- Rapid Test for Hydrophytic Vegetation	
2	<u>40</u>	<u>X</u>	<u>FAC</u>	<u>X</u> 2- Dominance Test is >50%	
3	<u>5</u>	_____	<u>FACU</u>	_____ 3-Prevalence Index is ≤ 3.0 ¹	
4	<u>10</u>	_____	<u>FAC</u>	_____ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
5	<u>15</u>	_____	<u>FAC</u>	_____ 5- Wetland Non-Vascular Plants ¹	
6	<u>5</u>	_____	<u>FACU</u>	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7	<u>2</u>	_____	<u>UPL</u>	_____	
8	<u>2</u>	_____	<u>FACU</u>	_____	
<u>99</u> = Total Cover				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
1	_____	_____	_____		
2	_____	_____	_____		
<u>0</u> = Total Cover					
% Bare Ground in Herb Stratum _____					

Remarks
 Other vegetation: Geranium sp., trace. Weakly hydrophytic.

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/3						Gravelly Loam	>30% rock
10+								refusal---cobble

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:
Refusal at 10" due to cobbles, compacted gravel fill.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

None

Remarks
Despite lack of pit depth, assumed to be dry at depth based on elevation above nearby ponded areas- perched conditions in area due to compacted fill.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 9
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 400
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
In Wetland B

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
	<u>0</u>	= Total Cover	
Sapling/Shrub Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
	<u>0</u>	= Total Cover	
Herb Stratum (plot size: <u>5</u>)			
1	<u>Juncus effusus</u>	<u>5</u>	<u>FACW</u>
2	<u>Agrostis stolonifera</u>	<u>40</u>	<u>X</u> <u>FAC</u>
3	<u>Epilobium watsonii</u>	<u>5</u>	<u>FACW</u>
4	<u>Leontodon nudicaulis</u>	<u>5</u>	<u>UPL</u>
5	<u>Trifolium repens</u>	<u>50</u>	<u>X</u> <u>FAC</u>
6	<u>Rumex crispus</u>	<u>1</u>	<u>FAC</u>
7	_____	_____	_____
8	_____	_____	_____
	<u>106</u>	= Total Cover	
Woody Vine Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum _____			

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of	Multiply by:	
OBL Species	x 1 =	<u>0</u>
FACW species	x 2 =	<u>0</u>
FAC Species	x 3 =	<u>0</u>
FACU Species	x 4 =	<u>0</u>
UPL Species	x 5 =	<u>0</u>
Column Totals	<u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

Hydrophytic Vegetation Indicators:

1- Rapid Test for Hydrophytic Vegetation X

2- Dominance Test is >50% X

3-Prevalence Index is ≤ 3 0¹ _____

4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet) _____

5- Wetland Non-Vascular Plants¹ _____

Problematic Hydrophytic Vegetation¹ (Explain) _____

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:
Moss 5%. Other vegetation in vicinity: Carex sp., Scirpus microcarpus, Salix seedlings.

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	2.5Y 3/1	85	10YR 3/4	15	C	M	Silty Clay Loam	coarse
4-8	10YR 3/2	20					Silt Loam	mixed matrix
4-8	10YR 3/3	80					Silt Loam	mixed matrix
8-12	10YR 4/4	98					Silt Loam	
8-12	2.5Y 3/2	2						on ped faces

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): 0-6
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available
None

Remarks:
Saturated in a zone from surface down 6 inches.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 10
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 400
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Adjacent to Wetland B (NW end)	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A)	
1	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)	
2	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>67%</u> (A/B)	
3	_____	_____	_____		
4	_____	_____	_____		
5	_____	_____	_____		
	<u>0</u>	= Total Cover			
Sapling/Shrub Stratum (plot size: _____)					
1	_____	_____	_____		
2	_____	_____	_____		
3	_____	_____	_____		
4	_____	_____	_____		
5	_____	_____	_____		
	<u>0</u>	= Total Cover			
Herb Stratum (plot size: <u>5</u>)				Prevalence Index Worksheet:	
1	<u>40</u>	<u>X</u>	<u>FAC</u>	Total % Cover of	Multiply by:
2	<u>20</u>	<u>X</u>	<u>FACU</u>	OBL Species _____ x 1 = <u>0</u>	
3	<u>10</u>	_____	<u>FAC</u>	FACW species _____ x 2 = <u>0</u>	
4	<u>3</u>	_____	<u>FACU</u>	FAC Species _____ x 3 = <u>0</u>	
5	<u>5</u>	_____	<u>FAC</u>	FACU Species _____ x 4 = <u>0</u>	
6	<u>2</u>	_____	<u>FACU</u>	UPL Species _____ x 5 = <u>0</u>	
7	<u>20</u>	<u>X</u>	<u>FAC</u>	Column Totals <u>0</u> (A)	<u>0</u> (B)
8	_____	_____	_____	Prevalence Index = B/A = <u>#DIV/0!</u>	
	<u>100</u>	= Total Cover			
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Indicators:	
1	_____	_____	_____	_____ 1- Rapid Test for Hydrophytic Vegetation	
2	_____	_____	_____	<u>X</u> 2- Dominance Test is >50%	
	<u>0</u>	= Total Cover		_____ 3-Prevalence Index is ≤ 3.0 ¹	
% Bare Ground in Herb Stratum _____				_____ 4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
Remarks: Weakly facultative vegetation.				_____ 5- Wetland Non-Vascular Plants ¹	
				_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	80					Silt Loam	jumbled matrix with >30% gravel
0-6	10YR 3/1	10	10YR 3/3	10	C	M	Silt Loam	jumbled matrix with >30% gravel
6+								refusal

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

Refusal at 6" due to buried layer of sediment cloth and cobble. Area disturbed in recent years- sediment cloth found buried most of this section.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks:

No hydrologic activity noted, despite nearby ponding- water table 'perched' in vicinity.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/22/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 11
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34CD/TL 400
 Landform (hillslope, terrace, etc.): _____ Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
Wetland A

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
5	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (plot size: <u>5</u>)				
1	<u>Agrostis stolonifera</u>	<u>95</u>	<u>X</u>	<u>FAC</u>
2	<u>Leontodon nudicaulis</u>	<u>2</u>		<u>UPL</u>
3	<u>Plantago lanceolata</u>	<u>1</u>		<u>FAC</u>
4	<u>Trifolium repens</u>	<u>1</u>		<u>FAC</u>
5	_____	_____	_____	
6	_____	_____	_____	
7	_____	_____	_____	
8	_____	_____	_____	
	<u>99</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum _____				

Dominance Test worksheet:			
Number of Dominant Species			
That are OBL, FACW, or FAC	<u>1</u>		(A)
Total Number of Dominant Species Across All Strata:	<u>1</u>		(B)
Percent of Dominant Species			
That are OBL, FACW, or FAC	<u>100%</u>		(A/B)
Prevalence Index Worksheet:			
Total % Cover of		Multiply by:	
OBL Species	_____	x 1 =	<u>0</u>
FACW species	_____	x 2 =	<u>0</u>
FAC Species	_____	x 3 =	<u>0</u>
FACU Species	_____	x 4 =	<u>0</u>
UPL Species	_____	x 5 =	<u>0</u>
Column Totals	<u>0</u> (A)		<u>0</u> (B)
Prevalence Index = B/A =			<u>#DIV/0!</u>
Hydrophytic Vegetation Indicators:			
_____	1- Rapid Test for Hydrophytic Vegetation		
<u>X</u>	2- Dominance Test is >50%		
_____	3-Prevalence Index is ≤ 3.0 ¹		
_____	4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)		
_____	5- Wetland Non-Vascular Plants ¹		
_____	Problematic Hydrophytic Vegetation ¹ (Explain)		
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.			
Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-4	10YR 3/2	70	10YR 3/4	10	C	M	Sandy Loam	coarse
0-4		20						gravel
4-12	10YR 3/4	40					Sandy Loam	mixed matrix
4-12	10YR 3/2	20						mixed matrix
4-12		40						gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input checked="" type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes X No _____ Depth (inches): 0-10
 (includes capillary fringe)

Wetland Hydrology Present?

Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks

Saturation from surface down to 10 inches. Algal mats at a distance of 4 feet from soil pit.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 6/18/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 12
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: PEMC
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydic Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
In Ditch 3

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1 _____	_____	_____	_____	That are OBL, FACW, or FAC: <u>2</u> (A)	
2 _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>2</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
4 _____	_____	_____	_____	Prevalence Index Worksheet:	
5 _____	<u>0</u>	= Total Cover		Total % Cover of _____ Multiply by: _____	
Sapling/Shrub Stratum (plot size: _____)				OBL Species _____ x 1 = <u>0</u>	
1 _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
2 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
3 _____	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
4 _____	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
5 _____	_____	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)	
Herb Stratum (plot size: <u>5'</u>)				Prevalence Index = B/A = <u>#DIV/0!</u>	
1 <u>Agrostis stolonifera</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:	
2 <u>Scirpus validus</u>	<u>5</u>	<u>X</u>	<u>OBL</u>	<u>X</u> Dominance Test is >50%	
3 <u>Juncus bufonius</u>	<u>3</u>		<u>FACW</u>	_____ Prevalence Index is ≤ 3.0 ¹	
4 _____	_____	_____	_____	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	_____ Wetland Non-Vascular Plants ¹	
6 _____	_____	_____	_____	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7 _____	_____	_____	_____	¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
8 _____	<u>28</u>	= Total Cover		Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
Woody Vine Stratum (plot size: _____)					
1 _____	_____	_____	_____		
2 _____	_____	_____	_____		
% Bare Ground in Herb Stratum <u>0</u>					
Remarks:					

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	10YR 3/2	100					Sand	Gravel present
>6								shovel refusal due to rock

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input checked="" type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:
 PHS was unable to dig in this area due to rocky soils. However, wetland vegetation, as well as primary indicators of hydrology (i.e. saturation) were observed. PHS's best professional judgement is that this area is saturated for at least two weeks during the growing season, and meets wetland criteria.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes No Depth (inches): _____
 Water Table Present? Yes No Depth (inches): _____
 Saturation Present? Yes No Depth (inches): 4
 (includes capillary fringe)

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
 None

Remarks

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 7/15/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 13
 Investigator(s): SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes _____ No <u>X</u>	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks:
This area was inundated from nearby irrigation on a previous site visit, and drainage patterns were observed. However, hydric soils are not present—this area does not meet wetland criteria.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (plot size: _____)				Number of Dominant Species
1 _____	_____	_____	_____	That are OBL, FACW, or FAC: <u>3</u> (A)
2 _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>3</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species
4 _____	_____	_____	_____	That are OBL, FACW, or FAC: <u>100%</u> (A/B)
_____	<u>0</u> = Total Cover	_____	_____	Prevalence Index Worksheet:
Sapling/Shrub Stratum (plot size: _____)				Total % Cover of _____ Multiply by: _____
1 _____	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>
2 _____	_____	_____	_____	FACW species _____ x 2 = <u>0</u>
3 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>
4 _____	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>
5 _____	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>
_____	<u>0</u> = Total Cover	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)
Herb Stratum (plot size: _____)				Prevalence Index = B/A = <u>#DIV/0!</u>
1 <u>Mowed grass</u>	<u>40</u>	<u>X</u>	<u>(FAC)</u>	Hydrophytic Vegetation Indicators:
2 <u>Poa annua</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	<u>X</u> Dominance Test is >50%
3 <u>Trifolium repens</u>	<u>25</u>	<u>X</u>	<u>FAC</u>	_____ Prevalence Index is ≤ 3.0 ¹
4 <u>Taraxacum officinale</u>	<u>5</u>	_____	<u>FACU</u>	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)
5 _____	_____	_____	_____	_____ Wetland Non-Vascular Plants ¹
6 _____	_____	_____	_____	_____ Problematic Hydrophytic Vegetation ¹ (Explain)
7 _____	_____	_____	_____	
8 _____	_____	_____	_____	
_____	<u>90</u> = Total Cover	_____	_____	
Woody Vine Stratum (plot size: _____)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
_____	<u>0</u> = Total Cover	_____	_____	
% Bare Ground in Herb Stratum <u>0</u>				

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	7.5YR 3/2	100					Silt Loam	
3-16	10YR 3/3	100					Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 7/15/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 14
 Investigator(s): SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <10%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78"W Datum: _____
 Soil Map Unit Name: Aloha silt loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
Near west lobe of Wetland E

VEGETATION - Use scientific names of plants.

Tree Stratum (plot size: <u>30'</u>)	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1 <u>Populus balsamifera</u>	<u>15</u>	<u>X</u>	<u>FAC</u>	
2 <u>Robinia pseudoacacia</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3 <u>Acer sp. (landscape variety)</u>	<u>10</u>	<u>X</u>	<u>NI</u>	Percent of Dominant Species That are OBL, FACW, or FAC: <u>40%</u> (A/B)
4 _____	_____	_____	_____	Prevalence Index Worksheet:
	<u>50</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: <u>5'</u>)				OBL Species _____ x 1 = <u>0</u>
1 <u>Rubus discolor</u>	<u>15</u>	<u>X</u>	<u>FACU</u>	FACW species _____ x 2 = <u>0</u>
2 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>
3 _____	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>
4 _____	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>
5 _____	_____	_____	_____	Column Totals <u>0</u> (A) <u>0</u> (B)
	<u>15</u>	= Total Cover		Prevalence Index = B/A = <u>#DIV/0!</u>
Herb Stratum (plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators:
1 <u>Poa trivialis</u>	<u>80</u>	<u>X</u>	<u>FACW</u>	
2 <u>Taraxacum officinale</u>	<u>5</u>	_____	<u>FACU</u>	_____ Prevalence Index is ≤ 3.0 ¹
3 <u>Cirsium vulgare</u>	<u>5</u>	_____	<u>FACU</u>	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)
4 <u>Rumex crispus</u>	<u>10</u>	_____	<u>FAC</u>	_____ Wetland Non-Vascular Plants ¹
5 <u>Epilobium watsonii</u>	<u>10</u>	_____	<u>FACW</u>	_____ Problematic Hydrophytic Vegetation ¹ (Explain)
6 <u>Holcus lanatus</u>	<u>3</u>	_____	<u>FAC</u>	
7 <u>Anthoxanthum odoratum</u>	<u>2</u>	_____	<u>FACU</u>	
8 _____	_____	_____	_____	
	<u>115</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/2	100					Silt Loam	
10-16	2.5Y 3/2	95	10YR 3/6	5			Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: None
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? Yes _____ No X Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 7/15/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 15
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <10%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78"W Datum: _____
 Soil Map Unit Name: Aloha silt loam NWI Classification: PEMC
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation Soil or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation Soil or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: In lower swale of Wetland E	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
5	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (plot size: <u>5'</u>)				Prevalence Index Worksheet: Total % Cover of _____ Multiply by: _____ OBL Species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC Species _____ x 3 = <u>0</u> FACU Species _____ x 4 = <u>0</u> UPL Species _____ x 5 = <u>0</u> Column Totals <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>#DIV/0!</u>
1	<u>25</u>	<u>X</u>	<u>FAC</u>	
2	<u>10</u>	_____	<u>FACW</u>	
3	<u>20</u>	<u>X</u>	<u>FAC</u>	
4	<u>3</u>	_____	<u>FAC</u>	
5	<u>3</u>	_____	<u>OBL</u>	
6	<u>3</u>	_____	<u>OBL</u>	
7	_____	_____	_____	
8	_____	_____	_____	
	<u>64</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%
 _____ Prevalence Index is $\leq 3.0^1$
 _____ Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)
 _____ Wetland Non-Vascular Plants¹
 _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 4/2	95	7.5YR 3/4	5	C	M	Silty Clay Loam	medium
3-16	10YR 4/2	95	7.5YR 3/4	5	C	M	Silty Clay Loam	coarse

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	⁴ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes X No _____ Depth (inches): surface
 (includes capillary fringe)

Wetland Hydrology Present? Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

None

Remarks:

2" of inundation observed adjacent to data point.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/13/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 16
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation Soil or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation Soil or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			
Remarks: <u>Near east lobe of Wetland E</u>					

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1	_____	_____	_____	That are OBL, FACW, or FAC: <u>1</u> (A)	
2	_____	_____	_____	Total Number of Dominant	
3	_____	_____	_____	Species Across All Strata: <u>3</u> (B)	
4	_____	_____	_____	Percent of Dominant Species	
	<u>0</u>	= Total Cover		That are OBL, FACW, or FAC: <u>33%</u> (A/B)	
Sapling/Shrub Stratum (plot size: _____)				Prevalence Index Worksheet:	
1	_____	_____	_____	Total % Cover of _____ Multiply by: _____	
2	_____	_____	_____	OBL Species _____ x 1 = <u>0</u>	
3	_____	_____	_____	FACW species _____ x 2 = <u>0</u>	
4	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
5	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
	<u>0</u>	= Total Cover		UPL Species _____ x 5 = <u>0</u>	
Herb Stratum (plot size: <u>5</u>)				Column Totals <u>0</u> (A) <u>0</u> (B)	
1	<u>35</u>	<u>X</u>	<u>FACU</u>	Prevalence Index = B/A = <u>#DIV/0!</u>	
2	<u>25</u>	<u>X</u>	<u>FACU</u>		
3	<u>1</u>		<u>FACU</u>		
4	<u>50</u>	<u>X</u>	<u>(FAC)</u>		
5	_____	_____	_____		
6	_____	_____	_____		
7	_____	_____	_____		
8	_____	_____	_____		
	<u>111</u>	= Total Cover			
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Indicators:	
1	_____	_____	_____	1- Rapid Test for Hydrophytic Vegetation	
2	_____	_____	_____	2- Dominance Test is >50%	
	<u>0</u>	= Total Cover		3-Prevalence Index is ≤ 3.0 ¹	
% Bare Ground in Herb Stratum _____				4-Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
				5- Wetland Non-Vascular Plants ¹	
				Problematic Hydrophytic Vegetation ¹ (Explain)	
				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
				Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	
Remarks:					

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 3/3	90					Silt Loam	mixed matrix
0-8	10YR 3/2	10					Silt Loam	
8-12	10YR 4/3	75	10YR 3/4	15	C	M	Silt Loam	medium
			7.5YR 3/4	10	C	M		medium
12-16	2.5Y 4/2	75	10YR 3/4	25	C	M	Silt Loam	medium/coarse

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes X No _____ Depth (inches): 15
 Saturation Present? Yes X No _____ Depth (inches): 12
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 4/13/2011
 Applicant/Owner: Port of Portland State: OR Sampling Point: 17
 Investigator(s): FS/SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%) <5
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation Soil or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Y
 Are vegetation Soil or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	
Remarks: Within east lobe of Wetland E	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
5	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (plot size: <u>5</u>)				Prevalence Index Worksheet: Total % Cover of _____ Multiply by: OBL Species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC Species _____ x 3 = <u>0</u> FACU Species _____ x 4 = <u>0</u> UPL Species _____ x 5 = <u>0</u> Column Totals <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>#DIV/0!</u>
1	<u>Poa pratensis</u> 10		FAC	
2	<u>Poa trivialis</u> 40	X	FACW	
3	<u>Epilobium watsonii</u> 5		FACW	
4	<u>Rumex obtusifolius</u> 20	X	FAC	
5	<u>Ranunculus repens</u> 10		FACW	
6	<u>Veronica americana</u> 10		OBL	
7	<u>Rubus discolor</u> <1		FACU	
8	<u>Cardamine oligosperma</u> 5		FAC	
	<u>100</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum _____				
Remarks:				

Hydrophytic Vegetation Indicators:

- 1- Rapid Test for Hydrophytic Vegetation
- 2- Dominance Test is >50% X
- 3-Prevalence Index is ≤ 3.0¹
- 4-Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)
- 5- Wetland Non-Vascular Plants¹

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/1	60	10YR 3/3	40	C	M	Silty Clay Loam	disturbed soil
0-10	10YR 3/2	90	7.5YR 4/4	10	C	M	Silty Clay Loam	mixed ~50:50
10-16+	5Y 4/3	85	10YR 4/6	15	C	M	Gravelly Loam	mixed ~10% gravel

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Compacted loam
Depth (inches): 10

Hydric Soil Present? Yes No

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA1, 2, 4A, and 4B)
<input checked="" type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input checked="" type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>1</u>
Water Table Present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0</u>
Saturation Present? (includes capillary fringe)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Depth (inches): <u>0</u>

Wetland Hydrology Present? Yes No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 6/18/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 18
 Investigator(s): SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <15%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation Soil or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation Soil or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: South of Wetland F	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: _____)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>0%</u> (A/B)
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
	<u>0</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: _____)				Prevalence Index Worksheet: Total % Cover of _____ Multiply by: _____ OBL Species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC Species _____ x 3 = <u>0</u> FACU Species _____ x 4 = <u>0</u> UPL Species _____ x 5 = <u>0</u> Column Totals <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>#DIV/0!</u>
1	_____	_____	_____	
2	_____	_____	_____	
3	_____	_____	_____	
4	_____	_____	_____	
5	_____	_____	_____	
	<u>0</u>	= Total Cover		
Herb Stratum (plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤ 3.0 ¹ _____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1	<u>3</u>	<u>Cirsium arvense</u>	<u>FACU</u>	
2	<u>10</u>	<u>Hypochaeris radicata</u>	<u>FACU</u>	
3	<u>15</u>	<u>Lotus corniculatus</u>	<u>FAC</u>	
4	<u>2</u>	<u>Leontodon nudicaulis</u>	<u>UPL</u>	
5	<u>70</u>	<u>Lolium perenne</u>	<u>FACU</u>	
6	<u>3</u>	<u>Taraxacum officinale</u>	<u>FACU</u>	
7	<u>1</u>	<u>Poa annua</u>	<u>FAC</u>	
8	<u>3</u>	<u>Vicia sp.</u>	<u>(FAC)</u>	
	<u>107</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				
1	_____	_____	_____	
2	_____	_____	_____	
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				
Remarks:				

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	7.5YR 3/2	100					Silt Loam	
10-16	10YR 3/2	95	10YR 3/4	5	C	M	Silt Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches) _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 6/18/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 19
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <15%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78"W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: PEMC
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
Within upper end of Wetland F

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:		
Tree Stratum (plot size: _____)				Number of Dominant Species		
1 _____				That are OBL, FACW, or FAC: <u>3</u> (A)		
2 _____				Total Number of Dominant Species Across All Strata: <u>3</u> (B)		
3 _____				Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)		
4 _____				Prevalence Index Worksheet:		
5 _____	<u>0</u>	= Total Cover		Total % Cover of _____ Multiply by: _____		
Sapling/Shrub Stratum (plot size: _____)				OBL Species _____ x 1 = <u>0</u>		
1 _____				FACW species _____ x 2 = <u>0</u>		
2 _____				FAC Species _____ x 3 = <u>0</u>		
3 _____				FACU Species _____ x 4 = <u>0</u>		
4 _____				UPL Species _____ x 5 = <u>0</u>		
5 _____				Column Totals <u>0</u> (A) <u>0</u> (B)		
Herb Stratum (plot size: <u>5'</u>)				Prevalence Index = B/A = <u>#DIV/0!</u>		
1 <u>Holcus lanatus</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:		
2 <u>Lotus corniculatus</u>	<u>30</u>	<u>X</u>	<u>FAC</u>	<u>X</u> Dominance Test is >50%		
3 <u>Mowed grass</u>	<u>40</u>	<u>X</u>	<u>(FAC)</u>	_____ Prevalence Index is ≤ 3.0 ¹		
4 <u>Equisetum arvense</u>	<u>10</u>		<u>FAC</u>	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)		
5 _____				_____ Wetland Non-Vascular Plants ¹		
6 _____				_____ Problematic Hydrophytic Vegetation ¹ (Explain)		
7 _____				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.		
8 _____				Hydrophytic Vegetation Present? Yes <u>X</u> No _____		
	<u>110</u>	= Total Cover				
Woody Vine Stratum (plot size: _____)						
1 _____						
2 _____						
	<u>0</u>	= Total Cover				
% Bare Ground in Herb Stratum <u>0</u>						

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-8	10YR 2/2	95	10YR 3/6	5	C	M	Silty Clay Loam	medium
8-16	10YR 2/2	95	10YR 3/6	5	C	M	Silty Clay Loam	medium

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches) _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks

Surface saturation observed in this area on a previous site visit; standing water observed 5' from this data point on the day data was taken. This area is a seep located on a moderate slope.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 6/18/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 20
 Investigator(s): SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <15%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Wolent silt loam NWI Classification: PEMC

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS - Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
South edge of Wetland G (pond)

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
	<u>0</u>	= Total Cover	
Sapling/Shrub Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
	<u>0</u>	= Total Cover	
Herb Stratum (plot size: <u>5'</u>)			
1	<u>Phalaris arundinacea</u>	<u>X</u>	<u>FACW</u>
2	<u>Plantago lanceolata</u>		<u>FAC</u>
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____
8	_____	_____	_____
	<u>100</u>	= Total Cover	
Woody Vine Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum	<u>0</u>		

Dominance Test worksheet:

Number of Dominant Species That are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index Worksheet:

Total % Cover of	Multiply by:	
OBL Species	x 1 =	<u>0</u>
FACW species	x 2 =	<u>0</u>
FAC Species	x 3 =	<u>0</u>
FACU Species	x 4 =	<u>0</u>
UPL Species	x 5 =	<u>0</u>
Column Totals	<u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%
 _____ Prevalence Index is ≤ 3.0¹
 _____ Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)
 _____ Wetland Non-Vascular Plants¹
 _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of Indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	10YR 3/2	100					Silt Loam	
3-14	2.5Y 3/1	90	10YR 3/4	10	C	M	Silty Clay Loam	common

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Silt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input checked="" type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input checked="" type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes X No _____ Depth (inches): 8
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 7/15/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 21
 Investigator(s): SE Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <10%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Aloha silt loam NWI Classification: Upland

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	

Remarks:
Upslope of Wetland H. Vegetation in this area is dominated by FAC grasses and is regularly mowed. Although hydric soils were present, no hydrology indicators were observed. PHS's best professional judgment is that this area does not adequately meet wetland criteria.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	
Tree Stratum (plot size: <u>30</u>)				Dominance Test worksheet: Number of Dominant Species That are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That are OBL, FACW, or FAC: <u>100%</u> (A/B)
1	<u>40</u>	<u>X</u>	<u>NI</u>	
2				
3				
4				
	<u>40</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: _____)				Prevalence Index Worksheet: Total % Cover of _____ Multiply by: OBL Species _____ x 1 = <u>0</u> FACW species _____ x 2 = <u>0</u> FAC Species _____ x 3 = <u>0</u> FACU Species _____ x 4 = <u>0</u> UPL Species _____ x 5 = <u>0</u> Column Totals <u>0</u> (A) <u>0</u> (B) Prevalence Index = B/A = <u>#DIV/0!</u>
1				
2				
3				
4				
5				
	<u>0</u>	= Total Cover		
Herb Stratum (plot size: <u>5</u>)				Hydrophytic Vegetation Indicators: <u>X</u> Dominance Test is >50% _____ Prevalence Index is ≤ 3.0 ¹ _____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain)
1	<u>10</u>		<u>FACU</u>	
2	<u>7</u>		<u>FACU</u>	
3	<u>10</u>		<u>FAC</u>	
4	<u>2</u>		<u>FACU</u>	
5	<u>3</u>		<u>UPL</u>	
6	<u>1</u>		<u>FAC</u>	
7	<u>70</u>	<u>X</u>	<u>(FAC)</u>	
8				
	<u>103</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. Hydrophytic Vegetation Present? Yes <u>X</u> No _____
1				
2				
	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum <u>0</u>				

Remarks:
PHS was unable to identify the Agrostis species due to recent mowing. PHS assumes the indicator status is FAC.

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-5	10YR 3/2	100					Silt Loam	
5-17	10YR 4/2	90	10YR 3/2	10	C	M	Silt Loam	common

¹Type. C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location. PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches) _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 6/18/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 22
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <10%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Aloha silt loam NWI Classification: PEMC
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>X</u> No _____	Is Sampled Area within a Wetland? Yes <u>X</u> No _____
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes <u>X</u> No _____	

Remarks:
Within Wetland H. Drainage patterns were observed, and the wetland is located at the toe of the moderate slope below the irrigation pond.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: _____)				Number of Dominant Species	
1 _____				That are OBL, FACW, or FAC: <u>4</u> (A)	
2 _____				Total Number of Dominant Species Across All Strata: <u>4</u> (B)	
3 _____				Percent of Dominant Species	
4 _____				That are OBL, FACW, or FAC: <u>100%</u> (A/B)	
5 _____	<u>0</u> = Total Cover			Prevalence Index Worksheet:	
Sapling/Shrub Stratum (plot size: _____)				Total % Cover of _____ Multiply by: _____	
1 _____				OBL Species _____ x 1 = <u>0</u>	
2 _____				FACW species _____ x 2 = <u>0</u>	
3 _____				FAC Species _____ x 3 = <u>0</u>	
4 _____				FACU Species _____ x 4 = <u>0</u>	
5 _____	<u>0</u> = Total Cover			UPL Species _____ x 5 = <u>0</u>	
Herb Stratum (plot size: <u>5'</u>)				Column Totals <u>0</u> (A) <u>0</u> (B)	
1 <u>Holcus lanatus</u>	<u>25</u>	<u>X</u>	<u>FAC</u>	Prevalence Index = B/A = <u>#DIV/0!</u>	
2 <u>Lotus corniculatus</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	Hydrophytic Vegetation Indicators:	
3 <u>Trifolium repens</u>	<u>20</u>	<u>X</u>	<u>FAC</u>	<u>X</u> Dominance Test is >50%	
4 <u>Mowed grass</u>	<u>30</u>	<u>X</u>	<u>(FAC)</u>	_____ Prevalence Index is ≤ 3.0 ¹	
5 <u>Equisetum arvense</u>	<u>3</u>		<u>FAC</u>	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
6 <u>Hypochaeris radicata</u>	<u>15</u>		<u>FACU</u>	_____ Wetland Non-Vascular Plants ¹	
7 _____				_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
8 _____	<u>113</u> = Total Cover			¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Woody Vine Stratum (plot size: _____)				Hydrophytic Vegetation Present? Yes <u>X</u> No _____	
1 _____					
2 _____	<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10YR 3/2	80	7.5YR 4/6	10			Silt Loam	common
0-10	" "		7.5YR 3/4	10			Silt Loam	common
10-16	10YR 3/1	90	7.5YR 4/6	10			Silt Loam	common

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input checked="" type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? Yes _____ No X Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present?

Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available.

None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 9/9/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 23
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <15%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Wollant silt loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes _____ No <u>X</u>	Is Sampled Area within a Wetland? Yes _____ No <u>X</u>
Hydric Soil Present? Yes <u>X</u> No _____	
Wetland Hydrology Present? Yes _____ No <u>X</u>	
Remarks: Adjacent to lower channel reach.	

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
Tree Stratum (plot size: <u>30</u>)				Number of Dominant Species
1 <u>Acer macrophyllum</u>	<u>35</u>	<u>X</u>	<u>FACU</u>	That are OBL, FACW, or FAC: <u>0</u> (A)
2 _____	_____	_____	_____	Total Number of Dominant Species Across All Strata: <u>5</u> (B)
3 _____	_____	_____	_____	Percent of Dominant Species That are OBL, FACW, or FAC: <u>0%</u> (A/B)
4 _____	_____	_____	_____	Prevalence Index Worksheet:
_____	<u>35</u>	= Total Cover		
Sapling/Shrub Stratum (plot size: <u>5</u>)				Total % Cover of _____ Multiply by: _____
1 <u>Rubus discolor</u>	<u>25</u>	<u>X</u>	<u>FACU</u>	OBL Species _____ x 1 = <u>0</u>
2 <u>Rubus ursinus</u>	<u>15</u>	<u>X</u>	<u>FACU</u>	FACW species _____ x 2 = <u>0</u>
3 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>
4 _____	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>
5 _____	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>
_____	<u>40</u>	= Total Cover		Column Totals <u>0</u> (A) <u>0</u> (B)
Herb Stratum (plot size: <u>5</u>)				Prevalence Index = B/A = <u>#DIV/0!</u>
1 <u>Equisetum arvense</u>	<u>2</u>	_____	<u>FAC</u>	Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤ 3.0 ¹ _____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet) _____ Wetland Non-Vascular Plants ¹ _____ Problematic Hydrophytic Vegetation ¹ (Explain)
2 <u>Prunus sp.</u>	<u>8</u>	<u>X</u>	<u>(FACU)</u>	
3 <u>Tellima grandiflora</u>	<u>5</u>	<u>X</u>	<u>UPL</u>	
4 _____	_____	_____	_____	
5 _____	_____	_____	_____	
6 _____	_____	_____	_____	
7 _____	_____	_____	_____	
8 _____	<u>15</u>	= Total Cover		
Woody Vine Stratum (plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1 _____	_____	_____	_____	
2 _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
_____	<u>0</u>	= Total Cover		
% Bare Ground in Herb Stratum _____				
Remarks:				

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 3/3	100					Silt Loam	
11-20	10YR 3/3	85	10YR 5/6	15	C	M	Silt Loam	common/rocks in soil profile

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?

Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks: _____

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 9/9/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 24
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <15%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Wolent silt loam NWI Classification: PFOC
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Remarks:
This area is below the OHWL of a small stream, and does not meet the criteria for wetland vegetation; however it should be considered a waters of the US/State.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: <u>30</u>)				Number of Dominant Species	
1 <u><i>Alnus rubra</i></u>	<u>20</u>	<u>X</u>	<u>FAC</u>	That are OBL, FACW, or FAC: <u>3</u> (A)	
2 <u><i>Acer macrophyllum</i></u>	<u>15</u>	<u>X</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)	
3 <u><i>Fraxinus latifolia</i></u>	<u>15</u>	<u>X</u>	<u>FACW</u>	Percent of Dominant Species That are OBL, FACW, or FAC: <u>50%</u> (A/B)	
4 _____				Prevalence Index Worksheet:	
	<u>50</u>	= Total Cover		Total % Cover of _____ Multiply by: _____	
Sapling/Shrub Stratum (plot size: <u>5</u>)				OBL Species _____ x 1 = <u>0</u>	
1 <u><i>Rubus discolor</i></u>	<u>10</u>	<u>X</u>	<u>FACU</u>	FACW species _____ x 2 = <u>0</u>	
2 <u><i>Rubus ursinus</i></u>	<u>20</u>	<u>X</u>	<u>FACU</u>	FAC Species _____ x 3 = <u>0</u>	
3 _____				FACU Species _____ x 4 = <u>0</u>	
4 _____				UPL Species _____ x 5 = <u>0</u>	
5 _____				Column Totals <u>0</u> (A) <u>0</u> (B)	
	<u>30</u>	= Total Cover		Prevalence Index = B/A = <u>#DIV/0!</u>	
Herb Stratum (plot size: <u>5</u>)				Hydrophytic Vegetation Indicators:	
1 <u><i>Urtica dioica</i></u>	<u>20</u>		<u>FAC</u>	_____ Dominance Test is >50%	
2 <u><i>Equisetum arvense</i></u>	<u>75</u>	<u>X</u>	<u>FAC</u>	_____ Prevalence Index is ≤ 3.0 ¹	
3 <u><i>Athyrium filix-femina</i></u>	<u>3</u>		<u>FAC</u>	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
4 <u><i>Epilobium watsonii</i></u>	<u>5</u>		<u>FACW</u>	_____ Wetland Non-Vascular Plants ¹	
5 <u><i>Geum macrophyllum</i></u>	<u>3</u>		<u>FACW</u>	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
6 _____					
7 _____					
8 _____					
	<u>106</u>	= Total Cover			
Woody Vine Stratum (plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1 _____				Hydrophytic Vegetation Present?	
2 _____				Yes _____ No <u>X</u>	
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

Profile Description: (Describe to the depth needed to document the Indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	7.5YR 3/2	100					Silt Loam	
3-20	10YR 3/2	90	10YR 4/6	10	C	M	Silty Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input checked="" type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available

None

Remarks:

Surface saturation observed in this area on July 15, 2008. Surface saturation was observed approximately 10 feet from this data point, in the main stream channel, on September 9, 2008.

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 9/9/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 25
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: Upland
 Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No <u>X</u>	Is Sampled Area within a Wetland?	Yes _____	No <u>X</u>
Hydric Soil Present?	Yes _____	No <u>X</u>			
Wetland Hydrology Present?	Yes _____	No <u>X</u>			

Remarks:
Located between two channel segments in a steeper-sloped area.

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status	Dominance Test worksheet:	
Tree Stratum (plot size: <u>30</u>)				Number of Dominant Species	
1 <u><i>Thuja plicata</i></u>	<u>60</u>	<u>X</u>	<u>FAC</u>	That are OBL, FACW, or FAC: <u>3</u> (A)	
2 <u><i>Acer macrophyllum</i></u>	<u>20</u>	<u>X</u>	<u>FACU</u>	Total Number of Dominant Species Across All Strata: <u>6</u> (B)	
3 _____	_____	_____	_____	Percent of Dominant Species	
4 _____	_____	_____	_____	That are OBL, FACW, or FAC: <u>50%</u> (A/B)	
	<u>80</u>	= Total Cover		Prevalence Index Worksheet:	
Sapling/Shrub Stratum (plot size: <u>5</u>)				Total % Cover of _____ Multiply by _____	
1 <u><i>Rubus ursinus</i></u>	<u>50</u>	<u>X</u>	<u>FACU</u>	OBL Species _____ x 1 = <u>0</u>	
2 <u><i>Rubus spectabilis</i></u>	<u>30</u>	<u>X</u>	<u>FAC</u>	FACW species _____ x 2 = <u>0</u>	
3 _____	_____	_____	_____	FAC Species _____ x 3 = <u>0</u>	
4 _____	_____	_____	_____	FACU Species _____ x 4 = <u>0</u>	
5 _____	_____	_____	_____	UPL Species _____ x 5 = <u>0</u>	
	<u>80</u>	= Total Cover		Column Totals <u>0</u> (A)	<u>0</u> (B)
Herb Stratum (plot size: <u>5</u>)				Prevalence Index = B/A = <u>#DIV/0!</u>	
1 <u><i>Polystichum munitum</i></u>	<u>10</u>	<u>X</u>	<u>FACU</u>	Hydrophytic Vegetation Indicators:	
2 <u><i>Athyrium filix-femina</i></u>	<u>5</u>	<u>X</u>	<u>FAC</u>	_____ Dominance Test is >50%	
3 _____	_____	_____	_____	_____ Prevalence Index is ≤ 3.0 ¹	
4 _____	_____	_____	_____	_____ Morphological Adaptations ¹ (provide supporting data in Remarks or on a separate sheet)	
5 _____	_____	_____	_____	_____ Wetland Non-Vascular Plants ¹	
6 _____	_____	_____	_____	_____ Problematic Hydrophytic Vegetation ¹ (Explain)	
7 _____	_____	_____	_____		
8 _____	_____	_____	_____		
	<u>15</u>	= Total Cover			
Woody Vine Stratum (plot size: _____)				¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
1 _____	_____	_____	_____	Hydrophytic Vegetation Present?	
2 _____	_____	_____	_____	Yes _____ No <u>X</u>	
	<u>0</u>	= Total Cover			
% Bare Ground in Herb Stratum <u>0</u>					

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-20	10YR 3/3	100					Silt Loam	cobble present

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.) Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: None
Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)		Secondary Indicators (2 or more required)
<input type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:
Surface Water Present? Yes _____ No X Depth (inches): _____
Water Table Present? Yes _____ No X Depth (inches): _____
Saturation Present? Yes _____ No X Depth (inches): _____
(includes capillary fringe)

Wetland Hydrology Present?
Yes _____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:
None

Remarks:

WETLAND DETERMINATION DATA FORM - Western Mountains, Valleys, and Coast Region

Project/Site: LSI Property City/County: Gresham/Multnomah Sampling Date: 9/9/2008
 Applicant/Owner: Port of Portland State: OR Sampling Point: 26
 Investigator(s): AH Section, Township, Range: Township 1N/Range 3 East/Section 34C/TL 500
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Slope Slope (%): <5%
 Subregion (LRR): A Lat: 45°31'18.69" N Long: 122°25'29.78" W Datum: _____
 Soil Map Unit Name: Latourell loam NWI Classification: PSSC

Are climatic/hydrologic conditions on the site typical for this time of year? Yes X No _____ (if no, explain in Remarks)
 Are vegetation _____ Soil _____ or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? (Y/N) Yes
 Are vegetation _____ Soil _____ or Hydrology _____ naturally problematic? If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No _____	is Sampled Area within a Wetland?	Yes <u>X</u>	No _____
Hydric Soil Present?	Yes <u>X</u>	No _____			
Wetland Hydrology Present?	Yes <u>X</u>	No _____			

Remarks:
Within a shallow drainageway

VEGETATION - Use scientific names of plants.

	absolute % cover	Dominant Species?	Indicator Status
Tree Stratum (plot size: <u>30</u>)			
1	_____	_____	_____
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
	<u>0</u>	= Total Cover	
Sapling/Shrub Stratum (plot size: <u>5'</u>)			
1	<u>Rubus spectabilis</u> <u>5</u>	<u>X</u>	<u>FAC</u>
2	_____	_____	_____
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
	<u>5</u>	= Total Cover	
Herb Stratum (plot size: <u>5'</u>)			
1	<u>Hydrophyllum tenuipes</u> <u>15</u>	<u>X</u>	<u>NI</u>
2	<u>Athyrium filix-femina</u> <u>5</u>	<u>X</u>	<u>FAC</u>
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____
6	_____	_____	_____
7	_____	_____	_____
8	_____	_____	_____
	<u>20</u>	= Total Cover	
Woody Vine Stratum (plot size: _____)			
1	_____	_____	_____
2	_____	_____	_____
	<u>0</u>	= Total Cover	
% Bare Ground in Herb Stratum <u>75</u>			

Dominance Test worksheet:

Number of Dominant Species
 That are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species
 That are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index Worksheet:

Total % Cover of	Multiply by:	
OBL Species	x 1 =	<u>0</u>
FACW species	x 2 =	<u>0</u>
FAC Species	x 3 =	<u>0</u>
FACU Species	x 4 =	<u>0</u>
UPL Species	x 5 =	<u>0</u>
Column Totals	<u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = #DIV/0!

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%
 _____ Prevalence Index is ≤ 3.0¹
 _____ Morphological Adaptations¹ (provide supporting data in Remarks or on a separate sheet)
 _____ Wetland Non-Vascular Plants¹
 _____ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No _____

Remarks:

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	10YR 2/2	90	10YR 5/8	10	C	M	Silt Loam	common/fine cobbles throughout soil profile

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains

²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> Red Parent Material (TF2)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Loamy Mucky Mineral (F1) (except MLRA 1)	<input type="checkbox"/> Other (explain in Remarks)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	
<input type="checkbox"/> Thick Dark Surface (A12)	<input checked="" type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	³ Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox Depressions (F8)	

Restrictive Layer (if present):

Type: None
 Depth (inches): _____

Hydric Soil Present? Yes X No _____

Remarks: _____

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

Secondary Indicators (2 or more required)

<input checked="" type="checkbox"/> Surface Water (A1)	<input type="checkbox"/> Water stained Leaves (B9) (Except MLRA 1, 2, 4A, and 4B)	<input type="checkbox"/> Water stained Leaves (B9) (MLRA1, 2, 4A, and 4B)
<input type="checkbox"/> High Water Table (A2)	<input type="checkbox"/> Salt Crust (B11)	<input checked="" type="checkbox"/> Drainage Patterns (B10)
<input type="checkbox"/> Saturation (A3)	<input type="checkbox"/> Aquatic Invertebrates (B13)	<input type="checkbox"/> Dry-Season Water Table (C2)
<input type="checkbox"/> Water Marks (B1)	<input type="checkbox"/> Hydrogen Sulfide Odor (C1)	<input type="checkbox"/> Saturation Visible on Aerial Imagery (C9)
<input type="checkbox"/> Sediment Deposits (B2)	<input type="checkbox"/> Oxidized Rhizospheres along Living Roots (C3)	<input checked="" type="checkbox"/> Geomorphic Position (D2)
<input type="checkbox"/> Drift Deposits (B3)	<input type="checkbox"/> Presence of Reduced Iron (C4)	<input type="checkbox"/> Shallow Aquitard (D3)
<input type="checkbox"/> Algal Mat or Crust (B4)	<input type="checkbox"/> Recent Iron Reduction in Plowed Soils (C6)	<input type="checkbox"/> Fac-Neutral Test (D5)
<input type="checkbox"/> Iron Deposits (B5)	<input type="checkbox"/> Stunted or Stressed Plants (D1) (LRR A)	<input type="checkbox"/> Raised Ant Mounds (D6) (LRR A)
<input type="checkbox"/> Surface Soil Cracks (B6)	<input type="checkbox"/> Other (Explain in Remarks)	<input type="checkbox"/> Frost-Heave Hummocks (D7)
<input type="checkbox"/> Inundation Visible on Aerial Imagery (B7)		
<input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes X No _____ Depth (inches): 2
 Water Table Present? Yes _____ No X Depth (inches): _____
 Saturation Present? Yes _____ No X Depth (inches): _____
 (includes capillary fringe)

Wetland Hydrology Present?
 Yes X No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

None

Remarks: _____

Appendix C

Site Photographs (ground level)

Photo A

Photo was taken looking west at Wetlands A and B



Photo B

Photo was taken looking southeast at Ditch 2.



Project # 4796
5/13/11

Photo documentation of the LSI site in Gresham, Oregon. Both photos were taken on April 13, 2011.



-Pacific Habitat Services, Inc.



Photo C

Photo taken looking northeast at Wetland G (Pond).

Photo D

Photo was taken looking northeast at Wetland H.



Project # 4796
5/13/11

Photo documentation of the LSI site in Gresham, Oregon. Top photo was taken on July 15, 2008; bottom photo on April 13, 2011.



-Pacific Habitat Services, Inc.



Photo E

Photo taken looking northwest at Wetland F and Pond (Wetland G)

Photo F

Photo taken looking south at the stream within the woods east of the Pond.



Project # 4796
5/13/11

Photo documentation of the LSI site in Gresham, Oregon. Top photo was taken on April 13, 2011; bottom photo taken on July 15, 2008.



-Pacific Habitat Services, Inc.



Photo G

Photo was taken looking east at the stream near data point 26.

Photo H

Photo was taken looking north at the stream, north of data point 25.



Project # 4796
5/13/11

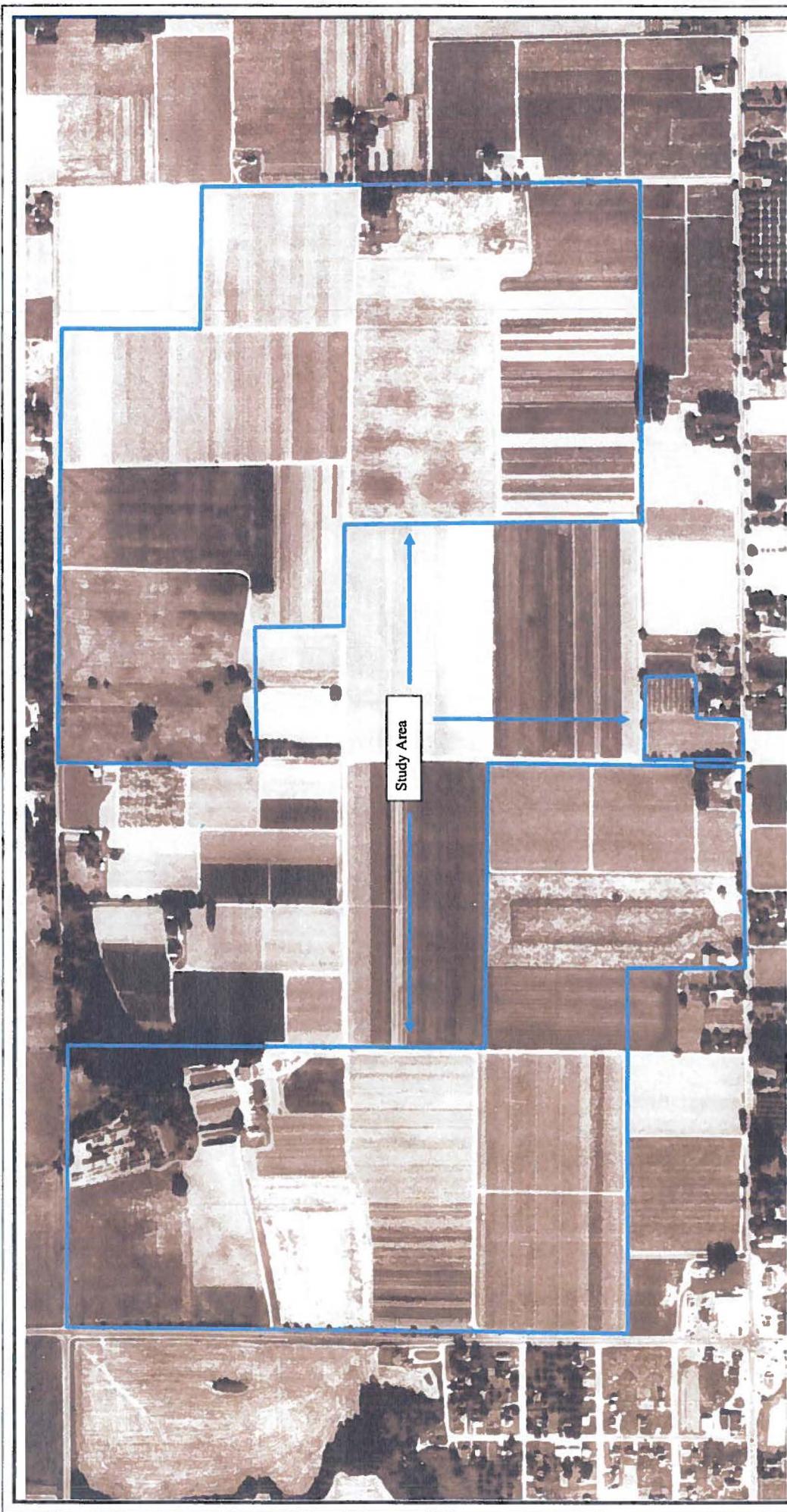
Photo documentation of the LSI site in Gresham, Oregon. Photos taken on September 9, 2008.



-Pacific Habitat Services, Inc.

Appendix D

Historic Aerial Photographs



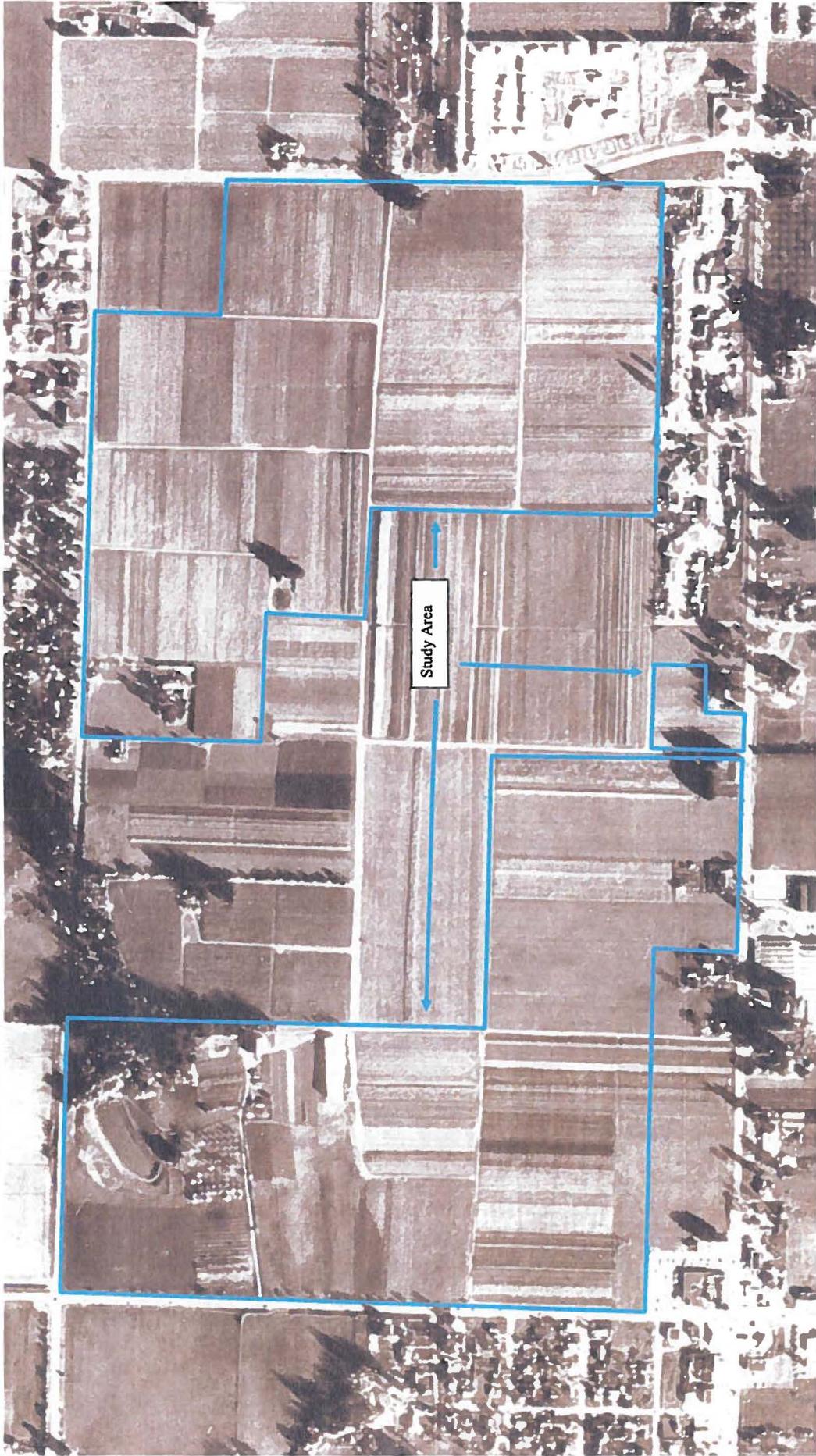
4796

5/13/11

1955 aerial photo of the LSI Property in Gresham, OR (photo courtesy of COE).



Pacific Habitat Services, Inc.



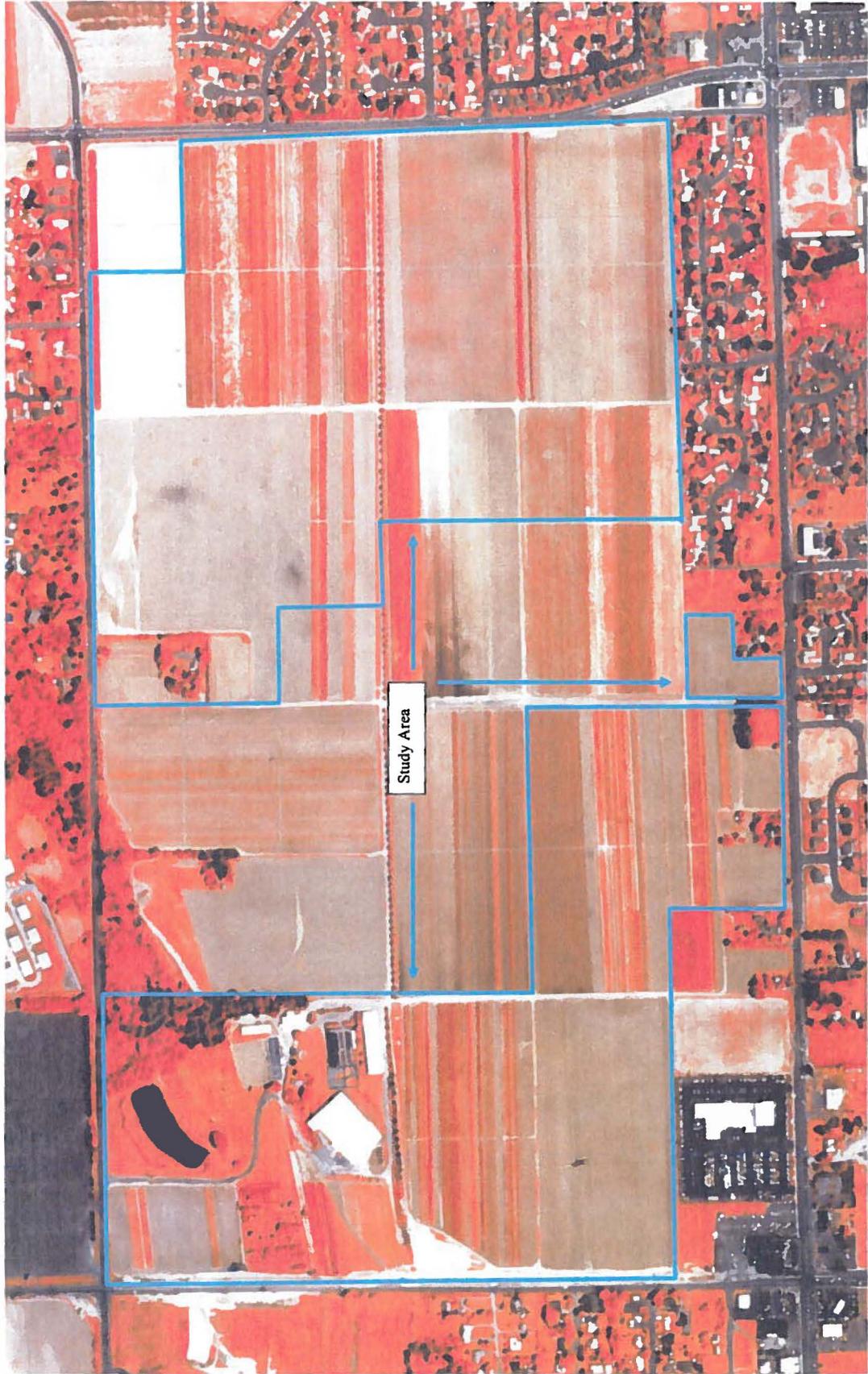
5/13/11

4796

1972 aerial photo of the LSI Property in Gresham, OR (photo courtesy of COE).



Pacific Habitat Services, Inc.



5/13/11

4796

1989 aerial photo of the LSI Property in Gresham, OR (photo courtesy of COE).



— Pacific Habitat Services, Inc.



4796

5/13/11

2004 aerial photo of the LSI Property in Gresham, OR (photo courtesy of COE).



Pacific Habitat Services, Inc.

Appendix E

Wetland Definitions and Methodology and References

WATERS OF THE STATE AND WETLAND DEFINITION AND CRITERIA

Regulatory Jurisdiction

Wetlands and water resources in Oregon are regulated by the Oregon Department of State Lands (DSL) under the Removal-Fill Law (ORS 196.800-196.990) and by the U.S. Army Corps of Engineers (COE) through Section 404 of the Clean Water Act.

The primary source documents for wetland delineations within Oregon include the *Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region*, (Version 2.0) which are recognized by both DSL and COE. Although the *Interim Regional Supplement* (2008) was in effect at the time of the initial fieldwork, the relatively minor changes between versions have not materially affected our methodology.

Waters of the State and Wetland Definition

Waters of the State are defined as “natural waterways including all tidal and nontidal bays, intermittent streams, constantly flowing streams, lakes, wetlands and other bodies of water in this state, navigable and nonnavigable...”. “Natural waterways” is further defined as waterways created naturally by geological and hydrological processes, waterways that would be natural but for human-caused disturbances (e.g. channelized or culverted streams, impounded waters, partially drained wetlands or ponds created in wetlands)...”(DSL, 2001).

Wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (DSL 2001).

Wetland Criteria

Based on the above definition, three major factors characterize a wetland: hydrology, substrate, and biota.

Wetland Hydrology

Wetland hydrology is related to duration of saturation, frequency of saturation, and critical depth of saturation. The 1987 manual defines wetland hydrology as inundation or saturation within a major portion of the root zone (usually above 12 inches), typically for at least 12.5% of the growing season. The wetland hydrology criterion can be met, however, if saturation within the major portion of the root zone is present for only 5% of the growing season, depending on other evidence.

The growing season is defined as the portion of the year when soil temperatures at 12.0 inches below the soil surface are higher than biological zero (41 degrees Fahrenheit, 5 degrees Celsius), but also allows approximation from frost free days, based on air temperature. The growing season for any given site or location is determined from US Natural Resources Conservation Service, (formerly Soil Conservation Service) data and information.

Wetland hydrologic indicators include the following: visual observation of inundation or saturation, watermarks, drift lines, sediment deposits, and/or oxidized rhizospheres with living roots. Oxidized rhizospheres are defined as yellowish-red zones around the roots and rhizomes of some plants that grow in frequently saturated soils. Other indicators of hydrology, including algal mats or crust, iron deposits, surface soil cracks, sparsely vegetated concave surface, salt crust, aquatic invertebrates, hydrogen sulfide odor, reduced iron, iron reduction in tilled soils, and stunted or stressed plants can also be used to determine the presence of wetland hydrology.

Wetland Substrate (Soils)

Most wetlands are characterized by hydric soils. Hydric soils are those that are ponded, flooded, or saturated for long enough during the growing season to develop anaerobic conditions. Periodic saturation of soils causes alternation of reduced and oxidized conditions, which leads to the formation of redoximorphic features (gleying and mottling). Mineral hydric soils will be either gleyed or will have bright mottles and/or low matrix chroma. The redoximorphic feature known as gley is a result of greatly reduced soil conditions, which result in a characteristic grayish, bluish or greenish soil color. The term mottling is used to describe areas of contrasting color within a soil matrix. The soil matrix is the portion of the soil layer that has the predominant color. Soils that have brightly colored mottles and a low matrix chroma are indicative of a fluctuating water table.

Hydric soil indicators include: organic content of greater than 50% by volume, and/or presence of redoximorphic features and dark soil matrix, as determined by the use of a Munsell Soil Color Chart. This chart establishes the chroma, value and hue of soils based on comparison with color chips. Mineral hydric soil must meet one of the 16 definitions for hydric soil indicators, or be classified as a "problem soil" in the Interim Regional Supplement.

Wetland Biota (Vegetation)

Wetland biota is defined as hydrophytic vegetation. A hydrophyte is a plant species that is capable of growing in substrates that are periodically deficient in oxygen as a result of saturated soil conditions. The U.S. Fish and Wildlife Service, in the *National List of Plant Species that Occur in Wetlands*, has established five basic groups of vegetation based on their frequency of occurrence in wetlands. These categories, referred to as the "wetland indicator status", are as follows: obligate wetland plants (OBL), facultative wetland (FACW), facultative (FAC), facultative upland (FACU), and obligate upland (UPL). Table 1 gives a definition of the plant indicator codes.

Table 1. Description of Wetland Plant Indicator Status Codes

Indicator Code	Status
OBL	Obligate wetland. Estimated to occur almost exclusively in wetlands (>99%)
FACW	Facultative wetland. Estimated to occur 67-99% of the time in wetlands.
FAC	Facultative. Occur equally in wetlands and non-wetlands (34-66%).
FACU	Facultative upland. Usually occur in non-wetlands (67-99%).
UPL	Obligate upland. Estimated to occur almost exclusively in non-wetlands (>99%). If a species is not assigned to one of the four groups described above it is assumed to be obligate upland.
NI	Has not yet received a wetland indicator status, but is probably not obligate upland.

Observations of hydrology, soils, and vegetation, were made using the "Routine On-site" delineation method as defined in the 1987 manual and the Interim Regional Supplement for areas that were not currently in agricultural production. One-foot diameter soil pits were excavated to 20 inches and soil profiles were examined for hydric soil and wetland hydrology field indicators. In addition, a visual absolute-cover estimate of the dominant species of the plant community was performed using soil pit locations as a center of reference. Dominant plant species are based on estimates of absolute cover for herbaceous, and shrub species within a 5 foot radius of the sample point, and basal area cover for tree and woody vine species within a 30 foot radius of the sample point. Plant species in each vegetative layer, which are estimated at less than 20% of the total cover, are not considered to be dominant. The wetland indicator status is then used to determine if there is an overall dominance (greater than 50%) of wetland or upland plant species. If less than 50% of the dominant species are hydrophytic, then the prevalence index may be used to determine if the subdominant species are hydrophytic. If the prevalence index is less than or equal to 3, hydrophytic vegetation criterion is met.

During data collection, the soil profiles were examined for hydric soil and wetland hydrology field indicators. Plant species and cover were recorded. Data was recorded on standard data sheets which contain the information specified in the 1987 Corps Manual and the Interim Regional Supplement.